

Women in Medicine Spring, 1969

CONTENTS

HARVARD MEDICAL ALUMNI BULLETIN

Vol. 43 Spring 1969 No. 4

REUNION PROGRAM		
ALUMNI [DAY PROGRAM	2
	N OF WOMEN TO HMS	3
	e: First Lady of Harvard	4
	NITIES FOR WOMEN IN RESEARCH	6
	Time and A Bad Time	8
	ty of Kentucky	12
	Iniversity	17
		20
Editoria	LS	24
ALONG TI	he Perimeter	26
Profiles	OF HMS WOMEN	30
ALUMNI N	Notes	38
Book Rev	VIEW	45
Letters		45
DEATH N	OTICES	46
Cover:	In September, 1945 the first ladies of HMS were photographed on the hitherto all male steps of Building A. First row, l. to r. Edna Wojick; Doris Rubin; Edith Schwartz; Martha Caires; Marjorie Kirk. Second row, l. to r. Joanne Tanner; Shirley Gallup; Louise Stone; Marcia Gordon; Dora Benedict; Raquel Eidelman; Idolene Hegemann.	
CREDITS:	Cover designed by Steven B. Block. Photographs: Courtesy of <i>The Boston Globe</i> , p. 5. Artwork: Paul Regan, p. 8.	

JOSEPH GARLAND '19
Editor

25 SHATTUCK STREET
BOSTON, MASS. 02115

JOAN F. RAFTER
Associate Editor

HAZEL INGLIS
Assistant Editor

MILTON C. PAIGE, JR.
Advertising Manager

10 SHATTUCK ST., BOSTON 02115

EDITORIAL BOARD

Herrman L. Blumgart '21
Ernest Craige '43A
Paul J. Davis '63
Robert M. Goldwyn '56
Franz J. Ingelfinger '36
John H. Knowles, M.D.
Jean Mayer, Ph.D.
John C. Nemiah '43B
George S. Richardson '46
J. Gordon Scannell '40
Howard B. Sprague '22



ASSOCIATION OFFICERS

OLIVER COPE '28, President
JAMES M. FAULKNER '24,
President-Elect
WESLEY W. SPINK '32, Past President
BRADFORD CANNON '33, Vice President
WILLIAM W. BABSON '30, Secretary
CARL W. WALTER '32, Treasurer

COUNCILORS

HENRY F. ALLEN '43A

JAMES A. CAMPBELL '43B

EDWIN F. CAVE '24

CARLETON B. CHAPMAN '41

JOHN B. HICKAM '40

JOHN C. NEMIAH '43B

JOSEPH STOKES, III, '49

WILLIAM R. WADDELL '43B

CLAUDE E. WELCH '32

LEONARD W. CRONKHITE, JR., '50

Representative to

Associate Harvard Alumni

The opinions of contributors to the Bulletin do not necessarily reflect those of the Editorial Staff.

© HARVARD MEDICAL SCHOOL ALUMNI ASSOCIATION 1969

Langdon Parsons '27
Director of Alumni Relations
Dorothy A. Murphy
Associate Director

Harvard Medical School

1969 REUNIONS

WHAT'S HAPPENING, WHERE AND WHEN

Friday, May 30th **ALUMNI DAY** 1919 Dinner, Harvard Club, President's Room *1924 Dinner, Holyoke Center, Penthouse, 75 Mt. Auburn Street, Cambridge **1929 Dinner, The Herbert Adams', Wellesley Dinner, Sheraton-Boston Hotel, 1934 Commonwealth Room Dinner Dance, The Boston 1800 Club, River 1939 Room, 25 Lewis Street, East Boston *1944 Dinner Dance, The Country Club, 191 Clyde Street, Brookline 1949 Dinner Dance, State Street Bank Roof, 225 Franklin Street, Boston 1954 Dinner Dance, Charter House Hotel, Five Cambridge Parkway, Cambridge 1959 Dinner Dance, Somerset Hotel, Coronet Room

Cocktails, Countway Library, Minot Room

Thursday, May 29th

Dinner, Harvard Club, Harvard Hall

1944

1964

Saturday, May 31st CLASS DAY

1919 Luncheon, Countway Library, Minot Room 1924 Luncheon, The James Faulkner's, Brookline **1929 Outing and Clambake, The David Hurwitz's, Falmouth on Cape Cod 1934 Outing and Buffet Supper, The Richard Thompson's, Swampscott †1939 Outing and Clambake, The Francis Moore's, Marion on Cape Cod *1944 Outing and Clambake, The Langdon Burwell's, Woods Hole on Cape Cod †1949 Outing and Clambake, Raquel and Lawrence Cohen's, Plymouth on Cape Cod **§1954** Outing and Clambake, The Emerson Inn, Rockport Outing and Clambake, The Warren Center, 1959 Holliston 1964 Outing and Clambake, Castle Hill Foundation,

*By bus from Sheraton-Boston Hotel †By bus from Somerset Hotel **By bus from Children's Inn \$By bus from Charter House

Ipswich

ALUMNI PROGRAM

May 29, 30, & 31, 1969

ALUMNI DAY - Friday , May 30, 1969

REGISTRATION 8:00 a.m.-2:00 p.m. Building A MORNING PROGRAM Welcome 9:45 a.m. Longwood Quadrangle Langdon Parsons '27 * * * Earle Wayne Wilkins '44, Moderator Dean Robert Higgins Ebert The State of the Union Message Raquel Eidelman Cohen '49 **Alice Hamilton** Doris Rubin Bennett '49 The Community's Voice in Community Health Hildrus Augustus Poindexter '29 My World of Reality — Really? * * * President Mary Ingraham Bunting, Radcliffe **Radcliffe Women in Medicine** 11:45 a.m. Presentation of the 25th Reunion Gift 12:00 noon **Annual Business Meeting** Oliver Cope '28, President LUNCHEON ON THE LONGWOOD QUADRANGLE 12:15 p.m. AFTERNOON PROGRAM 2:15 p.m. Eben Alexander '39, Moderator Longwood Quadrangle * * * Robert Love McLaurin '44 Wedding of Neurology and Surgery * * * Richard Warren '34 Follow-up: An Antidote to Fragmentation Charles Brenton Huggins '24 **Harvey Cushing and the Students** Francis Daniels Moore '39 **Harvey Cushing at 100** * * * **Adjourn** 4:15 p.m. 6:00 p.m. **CLASS REUNION DINNERS**

1919, 1924, 1929, 1934, 1939, 1944, 1949, 1954, 1959, 1964

Admission of Women to HMS

by Helen S. Pittman, M.D. Admission Committee, HMS

HIS June marks the completion of the "Second Decade of Women" in the Harvard Medical School. The first decade was recognized by a brochure published by the Alumni Association and in the foreword, the chronology of the historic votes was recalled. The first approving Faculty action was taken on April 2, 1943 reaffirmed on May 22 of the following year. Approval by the Governing Boards came two weeks later, on June 5, 1944. The admission of women was authorized as permanent policy. The proportion of women to men admitted each year was to be decided by the Committee on Admission "solely on the basis of the quality of the applicants."

A year later, in 1945, Dr. Marian Ropes was appointed the first woman member of the committee. This apparently came about quite naturally, without fanfare. With a hiatus from 1947 to 1951 there has been at least one women on the committee ever since. For the most part, those who served have been of Faculty rank.

The purpose of this communication is to tell how the selection of women actually has been carried out. The answer is very simple: they are considered on their individual merits as "applicants." I feel considerable confidence in making this assertion as it is based on my own experience. I have served under two chairmen: Kendall Emerson, Jr. '33 (September 1951 to June 1955) and Perry J. Culver '41 (since September 1955), and have now been party to the selection of eight classes.

The Admission Committee has no quotas of any sort. We have no preconceived idea of "type." In the applicant pool (which this year numbers 1535) we are looking for individuals, male or female, who have already demonstrated superior academic achievement, and who give promise of capacity for productivity in any of the areas of medicinc. Coupled with this intellectual excellence, we seck evidence of those indefinable qualities called personality and character with emotional stability, for motivation based on some awareness of what

medicine is all about.

How do we set about this? We start with the interviews. They are arranged by a secretary and are random matchings based on the availability of the applicant and two interviewers on a given day and hour. Women are by no means always interviewed by a woman whereas a male applicant has occasionally been seen by two women! The interview is perhaps of special importance in the case of a women applicant: they are not subject to the draft and they do marry and have children. We know that the woman is not trying to find a way out of military service, but what thought has she given to the reconciliation of her obligations to medicine, marriage, and family?

This trioka is the subject of nation-wide concern today. Although not strictly related to admission procedure, it carries important overtones now that professional women no longer expect to remain celibate. Because of the awareness of our physician shortage, the matter of utilization of medical womanpower has been the subject of at least three national conferences: in 1966 and again in 1968 by the Josiah Macy, Jr. Foundation, and also in 1968 by the Womens' Bureau of the U. S. Department of Labor in conjunction with other organizations. It is not widely appreciated that the percentage of women physicians in the U.S. is lower (6.7 percent) than in 25 countries around the world, and lower than in any Western country save Spain.

All of the foregoing leads to discussion by the full Admission Committee of each applicant under consideration. No separate tally is kept for women; we do not record how many women we have accepted until, the class being completed, their number is totaled. Last year, 1967, 16 places in the Class of 1972 were offered to women, of whom 15 accepted. The figures for 1968-69 are not yet available at the time of this writing.

In summary, we do indeed try to carry out the vote of the Faculty of Medicine to admit solely on the basis of the quality of the applicant.

DR. ALICE: First Lady of Harvard

by Harriet L. Hardy, M.D. Lecturer on Medicine, HMS

R. Alice Hamilton, an American physician with the ability to write and speak fluently, to think clearly and to act on her conclusions, came to Boston in 1918, continuing her already remarkably productive career, as the first woman professor on the Harvard Medical School faculty. Dr. David Edsall, then dean of the Medical School, had arranged the appointment: he had become interested in industrial disease while an intern as a result of the need to treat severe heat cramps suffered by workers in the Pittsburgh steel mills. His interest continued and was made permanent by a command invitation from Sir William Osler to write a chapter on industrial diseases for Osler's Textbook of Medicine.

Dr. Hamilton's explanation of her invitation to join the Harvard faculty illustrated her candor and honesty of mind. Harvard, she writes, "has not changed her attitude toward women students in any way yet here she was putting a woman on the faculty. Industrial medicine had become a much more important branch during the war years, but it still had not attracted men, and I was really about the only candidate available."

Preparation for this novel role for Dr. Alice, as she is widely known, was unplanned and included a number of influences. She was educated in a scholarly home with three sisters

and a brother, to become a bookworm, as she describes it, until leaving for the formal education of Miss Porter's School in Farmington, Connecticut. When she chose medicine as a career, she entered the University of Michigan Medical School without a bachelor's degree. In her autobiography, she writes, "I chose medicine not because I was scientifically minded for I was deeply ignorant of science. I chose it because as a doctor I could go anywhere I pleased, to far-off lands or to city slums and be quite sure that I could be of use anywhere. I should meet all sorts and conditions of men." And this is exactly what she did with her life.

The next steps in Dr. Hamilton's education included studies in Germany, after a year of internship, most of it at the New England Hospital for Women and Children, one of the few hospitals accepting women interns. Describing her difficulty in finding professors to whose lectures she, a woman, would be admitted, Dr. Alice writes amusingly, "However, it is not for a woman who has been on the faculty at Harvard to be too derisive about German universities in the nineties. It is still true (1942) that though women work in Harvard museums and are permitted to read in Widener Library, they are always obliged to leave at six o'clock. They are assured that this rule is for their

own protection, against the undergraduates!"

During 1897, Dr. Hamilton was at Johns Hopkins studying pathological anatomy under Simon Flexner, and attending lectures and clinics of the greats of this period — Welch, Osler, Kelly, Howell, Abel. To find a medical school position for a medically trained specialist was not easy, but a job was offered Dr. Alice as a teacher at the Woman's Medical School of Northwestern University in Chicago. And here she found the link needed to join medical career with increasing enthusiasm for social reform.

The great American social reformer, Jane Addams (1860-1935), had, in 1889, founded a pioneer settlement house in Chicago named Hull House, modelled after Toynbee Hall in London. Reading of the Chicago Haymarket Riot of 1886 precipitated by radicals demanding direct action against social ills, which resulted in shooting by police, an event of great influence in Miss Addams's and Dr. Hamilton's life, appears so very like events in Chicago in 1968 as to give a strong feeling of déjà vu.

It was her work at Hull House, helping to care for workers' babies and learning of the parents' ills, that led Dr. Hamilton to begin her great contributions as the pioneer in the United States in the field of industrial disease. She worked for the State of Illinois, the United States Department of Labor, with industry, with unions making original and sound observations on the recognition and control of new and old hazards. Her studies of the toxic effects of benzol, lead, mercury, aniline dyes, carbon monoxide, and carbon disulphide in the United States industry are classics.

Because of her knowledge of this work, Dean Edsall invited Dr. Alice to give a series of Cutter lectures in 1918 on occupational disease and, while she was here for this purpose, asked her to become assistant professor of industrial medicine at HMS.

A series of requirements attached to the proposed academic appointment challenged the poise, good humor and sense of adventure fortunately found in this carefully brought up, well educated and well travelled young woman of the early 20th century. It was required that Dr. Hamilton not act on her right as a faculty mem-

ber to use the Harvard Club, which at that period had no ladies' entrance nor admitted members' wives. Further, the lady professor promised never to demand her quota of football tickets. Finally there was the problem of marching with the faculty at Commencement about which Dr. Alice writes, "Nor did I embarrass the faculty by marching in the commencement procession and sitting on the platform, though each year I received a printed invitation to do so. At the bottom of the page would be the warning that under no circumstances may a woman sit on the platform, which seemed a bit tactless, but I was sure it was not intentional."

In contrast, Dr. Hamilton writes of the kindness to her of the Edsalls, the Rosenaus, the Shattucks, Drinkers and Hunts when she began her Boston career. Because she was a "radical," involved in such causes as the injustice of the Sacco and Vanzetti case, helping to feed hungry German children after World War I, the suffragette movement, visiting Russia, and working with the League of Nations, Dr. Alice needed and cherished Dean Edsall's backing, and her life at the home of Dr. and Mrs. Amory Codman, both of them independent thinkers, was happy. One episode illustrated Dr. Hamilton's position; "A patriotic lady who habitually contributed to the budget of the Medical School wrote to a member of the Corporation saying she would never again give a penny to Harvard as long as a pro-German who went about rousing people's sympathies for Germany was on the faculty. The gentleman came at once to see me and to get a denial which he could show her. When I was obliged to tell him that much of the letter was true, that I was speaking as often as I could on the subject of starving German children and raising money to help them, he went to Dean Edsall about it. But the only result was an emphatic refusal on Dr. Edsall's part to interfere with me in any way.'

In 1935, Harvard, as Dr. Alice puts it, "made me a Professor Emeritus which is a great honor and pleasantly ignores my sex." She continued to be active writing, lecturing, serving as a consultant until she was nearly 90 years of age, living with her retired school teacher sister, Margaret,



Dr. Alice in 1959.

in Hadlyme, Connecticut. An artist sister Norah died in her forties. Edith Hamilton, the writer, older than Dr. Alice, lived to 98 and her "baby brother," a professor of languages, lived to the age of 90. Dr. Alice, living comfortably in memories of her youth, observed her hundredth birthday this year on February 27.

This is a short sketch of Dr. Alice Hamilton and her relation to the Medical School faculty. What, in summary, did she accomplish of value at the time, and of likely endurance? With Jane Addams, she was in the vanguard of activists for social reform; for political action; and for international understanding. In her chosen branch of medicine, industrial disease, Dr. Hamilton was a pioneer, one who blazed new trails in our relatively recent, technically developed country. Her own words describe well what she saw was needed in America. "I read everything I could find on the dangers to industrial workers, and what could be done to protect them. But it was all German, British, Austrian, Dutch, Swiss, even Italian or Spanish — everything but American. In those countries industrial medicine was a recognized branch of the medical sciences; in my own country it did not exist. When I talked to my medical friends about the strange silence on this subject in American medical magazines and textbooks, I gained the

impression that here was a subject tainted with Socialism or with feminine sentimentality for the poor. The American Medical Association had never had a meeting devoted to this subject."

With her knowledge of control of occupational diseases in various parts of the world and her experience of needs in this country, Dr. Alice wrote the classic United States texts in this field. In 1925 she published a book, Industrial Poisons in the United States, and in 1934 the first edition of the text Industrial Texicology, updated in a second edition in 1949. Physicians all over the world still use these books as basic references. Her writing reflects both Dr. Alice's skill as a physician trained to draw accurate conclusions from observations, and her perceptive outlook on human affairs in a lusty, rapidly developing industrial United States.

Perhaps her unique contribution to the study of occupational disease was her lifelong habit of going into a plant, an underground mine, a smelter, or the home of a sick worker. In this fashion, Dr. Alice learned at firsthand the character of disease, the job thought to be the cause of the illness, and its effect on the worker's health, his family and his future. This technique of study is not novel, but its use, often neglected today, gives Dr. Hamilton's work timeless authority.

Opportunities for Women in Medical Research

by Olive W. Smith, Ph.D.

H OW do you get into the field of medical research? What is it like after you get there? I can only give this information as it applies to Harvard Medical School, for it was there I was trained and worked. I received my Ph.D. degree in biochemistry in 1926, and advanced from research assistant, to research associate, to assistant professor of biochemistry in the Department of Gynecology at the Free Hospital for Women. I served a three-year term on the Admission Committee of HMS, a most educational experience, and I was director of research at the Fearing Research Laboratory of the Free Hospital until a few years ago when I delegated the responsibility to a younger scientist. I now hold the enigmatic title of consultant in biochemistry, which allows me to pursue my own investigations without carrying much of any other responsibility, a very happy state of affairs.

The ways of Harvard University are slow, but sure. Sometimes, when one is a victim of her deliberate ways, one wonders about the "sure," but if one can wait long enough, the University will do the right thing right. It took two years short of a century for Harvard to decide to accept women into the Medical School, after it was first proposed, in 1847, by Drs. Walter Channing and Oliver Wendall Holmes. Deliberations over the establishment of a Graduate School of Medical Sciences did not even begin until 1899, and lasted 10 years before reaching fruition. There was some disagreement between the Faculty of Arts and Sciences and the Faculty of Medicine as to which should award the degrees. In 1909 it was finally voted "that a division of Medical Sciences be constituted within the Faculty of Arts and Sciences of Harvard University, that a joint committee of this faculty and of the Faculty of Medicine take charge of the instruction and examination of candidates for the degrees of Ph.D., Sc.D., and M.S. and that the Faculty of Arts and Sciences award such degrees."

Nothing was said about women, but a few brave souls were allowed to take most of the required courses and fulfill the thesis requirements for a Ph.D., provided the head of the department in which she wished to study was broad minded. Professor Otto Folin was such a man, and I was the first woman Ph.D. from the Department of Biochemistry. Not all courses were open to women, either at the University or the Medical School. I had to go to M.I.T. for advanced organic chemistry, to the Harvard Summer School for physical chemistry, and there was no place in Boston where I could take anatomy. This made physiology, a required collateral course, pretty rugged, for the 125 medical students who were my classmates had all had a year of anatomy. And after all this, the female candidate who survived could not get a degree from Harvard. It was graciously awarded by Radcliffe, an institution that had had nothing to do with her except collect her registration and tuition fees. This situation has continued until very recently when Harvard took over the awarding of all Radcliffe degrees. Despite these difficulties, as of 1968, 57 of the 231 Ph.D.'s from the Graduate School of Medical Sciences at Harvard have been women or nearly 25 percent, a rather impressive figure. None of these difficulties exist today; the accident of sex plays no part in the treatment one receives.

As to getting started in medical research, there are three possible modes of entry, the front door, the side door and the back door. Let me mention getting an M.A. as another possible mode of entry. This might be called going in through the window. It appears to give one a better chance of getting married, but, for those really serious about making a contribution to medicine, has little else to recommend it.

The well-marked front door is going to a graduate school of medical sciences as a candidate for a Ph.D. Any of you who are going in this door must have already decided to do so, for the entrance requirements are pretty stiff, considerably more so than for going to medical school. I call medical school the side door, because a fairly high proportion of women who go to medical school end up doing research, especially the ones who get married. And then there is the back door, which is getting a job as a technician in a medical research laboratory. Good technicians are scarce as hen's teeth. There are many advantages to entering the field through this back door. College courses in sciences and the graduate courses required for an M.D. or Ph.D. are fascinating. They open up all sorts of exciting vistas for the person with an inquiring mind. In the laboratories you do a different experiment almost every day. Great fun, for these experiments have been carefully planned so that you will be sure to get a result. In fact, you will even be told if you got the right one.

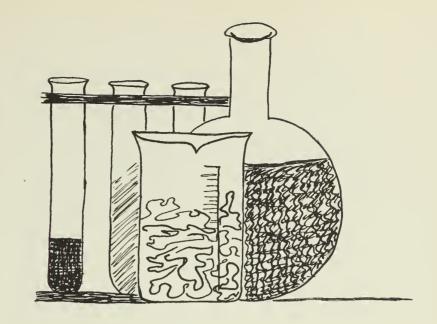
Independent research is not like that — not at all like that! Our laboratory notebooks record weeks, months, and often years of hard work, much of which proved nothing, for every positive result. And only time will tell whether or not we got the right answer. Unless you have an inborn compulsion to find out things for yourself, the pioneering spirit that

makes you keep going when the going is rough and seemingly endless, you won't like medical research. The only way to know if you will like it is to be exposed to it for a year or two, before you invest too many more years in the expensive process of being spoon fed by people paid to educate you.

I recommend the back door, just as I recommend to anyone who wants to be a doctor, male or female, that they first spend some time doing a paid job in a hospital. I might add that I do not think that volunteer work, in a laboratory or a hospital, is enough, for it is only when you are being paid for a job that you are forced to rub your nose in it. This nosc-rubbing process has resulted in a good many dropouts, but it seems to me a very worthwhile investment of time before going into medical research, especially these days when the public press is giving this field so much attention and making it appear considerably more exciting and glamorous than it actually is.

Not that it is not fun. It's great fun — if you like it. In fact, if you like it, it's practically an incurable disease. Professor Folin once told me that there are three capital "I's" in the spelling of an investigator; Intelligence, Imagination, and Indefatigability. If you really like it you are indefatigable — you cannot give up. There is the constant challenge that is never really met, for each question answered raises more unanswered questions. I wish more women would go into medical research for I think there are a number of feminine characteristics that make them particularly valuable in the field.

They are fundamentally less impatient, less easily discouraged, I think, and more determined than most men. They are also imaginative, creative and independent thinkers. They are great on ingenuity, and the female mind is well equipped for that most important contribution to research, an "infinite capacity for attention to details." Their greatest weakness lies in a tendency to be unable to see the forest for the trees, to get lost in the maze of their strivings. A man is likely to be better at keeping his eye on the eagle, at knowing which paths should be abandoned and which pursued. It is my experience that a man and woman collaboration team is



ideal for productivity, and if they happen to be married to each other, so much the better.

Which brings us to the age-old question of the practicality of a woman having a professional career and at the same time fulfilling her biological functions as a woman. It is not easy, but it can be done. It will make it a lot easier and more likely to be successful if you can manage to fall in love with a man who is in sympathy with your objective. An almost equally important consideration is getting good and permanent domestic help when the children begin to arrive. This is almost impossible today, and has probably caused more drop-outs than any other single factor. It is one of the factors, but not the only one, that has convinced me that women to whom the field of medicine appeals are much better off in research than in practice. When you are engaged in independent research your time schedule is in your own hands. If Johnny has a bad cold or a temper tantrum at the breakfast table, you can take time to handle the situation yourself in the way that will be best for Johnny, and postpone your experiment for that day until your husband comes home at night to hold the fort. You cannot do this if you are a doctor. Whatever field of medicine you enter, your patients have to come first, and the needs of sick people have to come first.

Even more important than the time schedule factor, I think, are the great demands upon onc's emotions involved in the carc of sick people. These demands are not emphasized by physicians, but they are inescapable. I can say this with authority, for I am the daughter of a doctor, the wife of a doctor, the mother of a doctor and the mother-in-law of a doctor. They are all good doctors, good husbands and fathers, but could never have been so without good wives to bear the brunt of the emotional demands of family life.

After more years than I like to count, of holding down a full-time job in research, at the same time being a wife, a mother, and now a grandmother, I feel that I can honestly say that I have done as good a job as I was capable of in all of these capacities, that my limitations have been in my capabilities rather than in the extent of my endeavors. I very much doubt if I could say this if I had gone into the practice of medicine, for I doubt that my emotions could have spread that far without getting very thin or mighty unstable. Research is not an emotional occupation. It is a constant intellectual challenge, a good antidote for the frequent emotional crises involved in raising a family.

I recommend medical research to you as a full-time, life-time career that can be done (if you have the insatiable curiosity, the creative urge and the stick-to-itiveness of the investigator) without compromising your biological functions as a woman. It is not easy, but it surely is rewarding.

The above is adapted from an address given to Wellesley College seniors, Oct. 5, 1966.



A Good Time and A Bad Time

by Nancy B. Kaltreider '64

"I'm going to watch someone taking my baby from me, take it in a car and leave . . . not really knowing right then where it's going, or ever knowing . . ."

THE problem of illegitimacy and forced marriage is a growing one in the America of today. This is attested to with a dry fervor by the statistics: 275,000 illegitimate births in the U.S. in 1967, one-half of all tecnage brides pregnant before marriage, one-third to one-half of all teenage marriages ending in divorce. However, the toll must be examined in much more human terms. What is the emotional impact of an unwanted pregnancy on a girl?

Over the past year I have seen about 300 unwed mothers in maternity homes in different parts of the country. The girls' backgrounds ranged from honored positions in the social register to the daily frustrations of the Negro city ghetto — but they all spoke poignantly of the unborn life they carried within them. While

evaluating the individual situations, I was struck that for so many of the girls the pregnancy was a cry for help — a cry that could have been heard by their families before the irrevocable act of conception. Once pregnant, the girl is flung into the most serious crisis of her life. With parental support and professional guidance, the pregnancy can be a maturing and even rewarding experience.

The girl whose sexual experience leads to a premarital pregnancy is rarely promiscuous. Most often she is involved in a "steady" relationship with one boy whom, at least at the moment, she really loves. She may be intellectually aware of the possibility of pregnancy, but seldom sees it as a reality. "I never thought it would happen to me." "Somehow, I just kept thinking I was a nice girl — not

the kind who gets pregnant." Contraceptives may have been available to the older girl, but it is difficult for her to decide to use them. "It made me feel dirty to plan ahead — somehow it seemed, well, more romantic to simply let things happen." "Sex just wouldn't feel natural if I thought about it beforehand. It would be more like going on a shopping trip. (Using contraceptives) would take the thrill away."

For each of these girls, premarital sex was seen as generally wrong but somehow permissible in their special relationship. In order to use contraceptives, they would have had to face the fact that the sexual relationship was something they enjoyed and anticipated in the future. The paradox of the new sexual freedom is that although premarital intercourse is now

more accepted by society, the resulting illegitimate pregnancy is not. The potential unwed mother thinks that she won't "get caught" because she has, consciously or unconsciously, blocked this possibility from her mind.

The expected date of the menstrual period comes and goes as the girl anxiously recalculates and thinks of reasons why she might be "just a little late." All too often, the girl is unaware of the early changes of pregnancy; her sexual information is a hodge-podge gathered from friends, sisters, and her embarrassed mother. The girl who is out of high school generally makes a doctor's appointment on her own. Already wary, she may use an assumed name, or add "Mrs." when she calls the office. The younger girl is more often forced to turn to a sister or friend. "You go to your friends for advice but you really want to be talking to your mother." Sometimes a worried mother confronts her newly moody daughter with the dread question "Are you pregnant?" — and the look of the girl's face is an answer in itself.

The visit to the physician's office is approached with dread. Even in the face of overwhelming evidence, the girl clings to the hope that she is not pregnant. She is often too embarrassed to admit the real reason for her appointment and may vaguely tell the doctor about her "irregular" periods, abdominal pain, or nausea. Occasionally the hurried physician may be unaware of the possibility of pregnancy and send her off with a false reassurance that the girl eagerly accepts. More often, sympathetic questioning and a careful physician examination reveal the early pregnancy. In a recent article, Clark E. Vincent wisely comments "Whether she becomes his private patient or never returns, the unwed mother's initial visit to a physician is a highly memorable experience for her. The words and the very manner in which the physician confirms her pregnancy are etched indelibly on her mind and emotions."

The diagnosis of pregnancy triggers a chain of reaction that leads to the most difficult time of the whole experience. As her denial is suddenly cracked, the girl is faced with a series of decisions. She must turn from thinking about the senior prom to the

now serious realities of marriage, bringing up an illegitimate child, or adoption. Even more difficult for the adolescent girl is the agonizing choice of when and how to tell her parents of the pregnancy. She wonders how the baby's father will react and pictures her future as hopelessly ruined.

The unwed girl views her pregnancy as a betrayal of the parents' trust. She generally expects her family to react with anger and imagines herself as being banished from the home forever. Faced with this painful situation, she may again deny to herself that she is pregnant. "I just pushed it out of my mind. I didn't look pregnant and I didn't feel pregnant so I tried not to think about it." The more mature girl may guiltily guard her secret as she tries to work out a plan for her future. She may find it important to prove to herself that she is grown up enough to handle the problem by making all the arrangements before confronting her parents.

The days or months that the girl keeps her secret from her family are long and lonely. No matter how casual her previous attitude toward sex, she now feels singled out and guilty. She is forced to try to maintain her normal outward composure as she tries to hide her growing body and upset feelings.

The most normal reaction to the discovery of pregnancy is "How do I get out of it?" The actual decision to get an abortion is a frightening one and shadowed by a fear of death. Her denial of the reality of the pregnancy may persist until she is beyond the safe time period for the termination of pregnancy. She may find, to her surprise, that she has real feeling about "killing" her unborn child or flagrantly violating the law. In some circumstances, the psychic damage of an abortion may be more serious and prolonged than that of going through the pregnancy. Many girls find the idea of abortion unacceptable but still consciously act out their hope for a miscarriage by increased activity, falling or taking home-made remedies. One girl commented with some humor, "I didn't know what to do when I went to horseback riding class. I couldn't say 'please excuse me because I'm pregnant' so I tried to bounce gently."

In almost all circumstances it is

best for the girl to inform her parents of the pregnancy. After planning the best approach for days, she usually blurts out the truth in a rush of words. At this moment, the girl probably has the greatest need for parental love and understanding in her life. I wish I could fully express the emotion with which the unwed mother describes her undemonstrative father's sudden bear hug or her mother's cry of "Why didn't you tell us sooner what a terrible burden to carry by yourself." The girl's words speak clearly "I was never close to my mother until she found out I was pregnant. I never thought she cared. Now I don't know what I'd do without her." "When she found out I was pregnant, she was so good. I never heard her say I love you and now she says it all the time. It's so different than it was before."

Parents have several normal responses to the crisis situation. All are part of the built-in desire to shield their child from as much hurt as possible. From the depths of their despair they wonder "What have I done wrong?" "How have I failed you as a parent?" This self-accusation is meaningless to the adolescent who sees the responsibility as entirely her own. The real answer probably lies somewhere in between, in the complex pattern of many relationships. In the time honored tradition of the shotgun wedding, the father says, "Wait 'till I get that dirty so and so that got my daughter pregnant." With the rare exception of actual rape, the girl's role has been at least that of a consenting partner and she finds it hard to understand the pain that this causes her family. "They just couldn't realize that their sweet, innocent little girl had been sleeping with someone." "Even when they knew, they couldn't let me off the pedestal." In true adolescent fashion, most girls react to their parents' blast of anger against the boy by staunchly defending him.

Once the denouement is over, the pregnant girl normally experiences a tremendous sense of relief. Just sharing her burden makes it somehow less heavy and the parental response, if not heart-warming, is rarely as dreadful as anticipated. Attention now shifts to the serious decisions that must be made. The parents may also consider abortion. If the girl has al-

ready discarded the possibility, she will be hurt by her parents' seemingly callous disregard for the life that she carries within her. It is equally as dangerous for the parents to assume that a marriage will take place. This may indeed be the best solution but the couple should not be forced into it without careful consideration. Even if a couple is very sure of their affection for each other, the addition of a baby to the normal stresses of early marriage may be disastrous.

The boy's reaction to the news of his paternity is often more variable than that of the girl. He inevitably feels proud of his now proven masculinity and in some cultures will openly boast of "the number of chicks I got pregnant." The immature partner of any age may flee the responsibility by leaving the area or angrily accusing "How do I know it's my kid?" He may encourage marriage as the natural outcome of his love for the girl and his unborn child; marriage is also urged by the boy out of guilt and society's expectation that he will protect the girl. It is very helpful for the parents to suggest that the couple meet together with a wise counselor — be it family doctor, social worker, pastor or psychiatrist — to discuss their motivation for marriage. If marriage is the choice, it should be carried through openly, in church, with the clear support of both families if at all possible. A hurried rush to the justice of the peace will only increase the guilt already surrounding the conception.

A careful consideration of the situation leads many couples and their families to realize that marriage is not the wisest solution — at least at this time. If motivation is unclear or financial stability uncertain, it is wisest to delay marriage at least until the baby is born. Although the child was conceived in the context of love, feelings may have changed greatly by the time the pregnancy is discovered. The rueful comment of many girls about matrimony is a wise one "I had already made one mistake. I didn't want to make two."

If the couple and their families decide that marriage is not the best solution, then planning must go on for the handling of the pregnancy. However, there should be an early decision about whether or not to enter a

maternity home. An older, independent girl may choose to go to another city, take an apartment by herself, and handle the adoption through an agency or private source. This course is certainly possible but does subject the girl to an isolated existence with little support and sometimes inadequate medical care. Even if a girl is planning to keep her child or to place it in temporary foster care, the services offered by a maternity home can be of great value. It is important that the young girl continue her education throughout the pregnancy rather than making this a lost time.

THE entrance into the maternity home is a dramatic experience for the girl. She often arrives at the front door somewhat disheveled and wearing a concealing coat even in the hottest weather. Her attempt to act maturely may be belied by the stuffed animal she clutches or the tears that keep brimming in her eyes. As she crosses the threshold, she steps into an experience from which she can never return to childhood.

Burdened by her guilt and fear, the entering girl pictures the home with bars on the windows and a conventlike atmosphere. She is hit by a contradictory rush of impressions. Everyone is pregnant and obviously so but somehow it seems much like a girls' dormitory. Somewhere in the distance a baby is crying and a girl sits smiling as she knits a pair of booties. The first greetings are casual and inevitable. "Hi, when are you due?" The new girl finds with relief that other girls have similar problems and that her pregnancy can no longer be completely denied in this new atmosphere. The warmth and acceptance of the staff allows her to relax and to begin to consider her own problems. The subject of pregnancy is no longer taboo but is even joked about. The girls in the home tend to be understanding and supportive of each other because "we're all in the same boat."

The girl sees a social worker and may be seen by a consulting psychiatrist or meet in regular group discussions. Slowly she begins to work through her feelings about herself, her family, and her child. The typical emotional lability of pregnancy is more pronounced under the stress of illegitimacy. The unwed mother finds herself easily provoked to tears or anger; she no longer feels competent to predict how she will react in a situation. "Sometimes you wonder if emotions are going to take over completely. It's a big part of you and you don't realize it until the time gets close." "Just holding another girl's baby, all of a sudden I felt utterly up a tree because I couldn't tell anymore how I'd be afterwards."

The decision about adoption can help a girl to discover her ability to maintain rationality in the face of strong emotion. As the life she carries within her becomes a wiggly, growing baby, the girl gradually becomes aware of the feeling of motherhood. She tries to focus on the future needs of her child while her heart cries "It's my baby, part of me, how can I give it away?"

During the last months of her pregnancy, the girl can be considerably strengthened by the new feeling of closeness with her family. She may resume a dependent relationship with her mother without the ambivalence that is appropriate for adolescence. All too often, the illegitimate pregnancy occurs in a family where there is much parental strife. The pregnant girl may see herself as a unifying factor in the family and react with a new sense of purpose. "I want to go home because I need them now. Before it seemed that nobody else cared so why should I? Now I try to keep the family together. There seems to be more meaning to my life. I feel like I'm a whole person." The girl is eager for her parents to be interested in her progress but also hopes that the parents can share her growing wonder at the life within her.

As the days push by and her increasing bulk makes the baby's presence undeniable, the girl must face the unknown terrors of labor and delivery. Like every pregnant woman in the world, she thinks and dreams of the event with a peculiar mixture of fact and fantasy. "You realize that a human being is going to come out of you and it's frightening." In a maternity home the educational program will include books and films about delivery. The films are often "from the other end" and the normal messiness of childbirth may add to the fantasies.

"All I could see was all that coming out of me and is there going to be anything left? I wonder if they'll take out anything they're not supposed to. I had a dream about that. Oh geez, it was awful." The girls in the maternity home frequently see their friends in early labor and eagerly question the new mothers who return. They find considerable reassurance that others get through the experience and much of the fear of the unknown is removed.

As the due date approaches, the girl withdraws and finds her thoughts turning inward. "I just want everybody to leave me alone. I want to sit in a corner. You think about things a lot more. You have a pain — and it's nothing — and you wish it was but you wish it wasn't." Finally, the funny little pains and contractions settle into some definite pattern and the real labor begins. The unwed mother tends to be surprisingly tolerant of the discomfort of labor and dwells on her sense of accomplishment. "It hurts but you're really happy. Pretty soon you're going to do something that's really great." Even the girl who cannot overcome her guilt about the baby's conception, now feels a surging pride in the process of creation. "When I had that baby I really felt like a woman, grownup, and that my life was worth something." Almost all the girls see the babies and may care for them for as long as ten days if adoption is planned. Most often they give a name to the child for the brief period of time that he will belong to them and may have a blessing with a minister and family attending. For many of the girls, the experience of giving birth provides the first opportunity to feel of some worth in their lives.

Post-partum, the girl who is planning adoption experiences all the grief of the loss of a loved one. She may think fondly back to when the baby was still inside her and no one could take him away. "I feel empty and funny. My uterus is still enlarged and I'd like to think that I'm still pregnant." The girl who has really faced the realities of the situation before delivery is now able to work through her emotions about giving up the baby with the conviction that she is doing what is best for the child. The rare girl who has steadfastly de-



nied any feelings about the pregnancy and planned no involvement with the child can suddenly be overwhelmed by emotions and decide to keep the baby at the last minute. In some situations keeping the child is the best decision but, all too often, the girl who keeps the baby is the one least prepared to assume the responsibility of motherhood. The parents who have been supportive, but somewhat distant from the pregnancy, are now emotionally confronted by the fact of a grandchild — perhaps their first.

The girl returns to the maternity home soon after delivery and stays for at least a week to recuperate physically and emotionally. This period is vital because she needs to share her experience with others and to talk about her bewildering rush of emotions. The mother who is keeping her baby needs to get comfortable with herself before handling the difficult situation of returning home with an illegitimate child. The mother who has decided on adoption has to make her peace with the baby and herself before preparing to sign the irrevocable papers. Sometime between the third and the tenth day the social worker will arrive; the girl must pick up her child, often lovingly swaddled in a handknit blanket, and walk to the door. She then kisses the baby for the last time and hands him over, knowing that she will never see him again. As she flees upstairs in tears, other girls in the home watch the car disappear down the drive — and they cry too. The adopted child is a gift given of great love.

The girl who has been through the experience of an unwed pregnancy can bring new strengths to her life. In followup studies, I found that the overwhelming majority of the girls were achieving considerably more than they had prior to the pregnancy. They seem almost driven to prove to themselves, their families, and the world

that they are worthy of trust. When the girls marry, they may find a fuller pleasure in their later children. A high school girl who gave up identical blond twins commented, "I watched the other mothers in the hospital feeding their babies propped on the bed while they were watching television, and I thought they don't know how much they have. I think I'll appreciate my children a lot more." Having come through a time that has changed her life, the new mother has a great need to go on sharing her feelings with someone after leaving the maternity home. Warm parental support is probably the most important factor in the difficult postpartum per-

I have traced the emotional pattern of an unwed pregnancy. All parents of teenagers must realize that their children are vulnerable. There are no easy answers but I am struck that the pregnancy is more a product of the parent-child relationship than of the boy-girl relationship. Over and over I hear the lament, "If I'd only known that they loved me . . ." The adolescent girl needs to know that she is trusted but that there are clear and reasonable guidelines for her behavior. Frequently pregnancy seems to occur in the "lost child" in the family — often the youngest who is dwarfed by her siblings' accomplishments or the girl who has been so good that "she's no trouble at all." Each child must feel loved for her uniqueness as an individual. This security is the greatest protection that can be given them against the heartbreak of pregnancy.

The girl who does get pregnant stands in great need of renewed parental love and support. The stress of the situation may open up new communication channels between parent and child that need never be closed again. She wants to be seen not just as a pregnant girl but also as a person with a future. She leaves the maternity home with fear and hope — and somehow better prepared for life.

There will be loneliness because of giving up your baby—and the months you've spent here will be gone from your life. And yet it's been a good time—and a bad time—and it's all got to be kept inside of you. It's a time when you begin to realize what

it is to grow up . . .



FIVE years ago it could be said: the University of Kentucky had the newest operating program in medical education. No longer. Happily, one institution after another is laying claim to the "newest" medical school, and Kentucky finds itself an adolescent, or at least a toddler, in the ranks, seeking the wisdom and competence of its elders while trying to keep ahead of its challenging younger siblings. Perhaps lessons drawn from Kentucky's infancy will be of some interest and value both to those schools now in the neo-natal period as well as to those seeking rejuvenation. (The terms "senility" and "second childhood" came to mind, but were discarded for fear that some readers might draw unjustified, specific inferences from these generalizations).

By the time the College of Medicine had graduated its fifth class in the Spring of 1968, its faculty had already revised the original curriculum. The school is proud of its contributions to behavioral science and

community medicine, but painfully conscious of its failure to design meaningful programs for comprehensive care. All components of the Medical Center are aware that a number of the original objectives have yet to be achieved, despite an auspicious start. What were these objectives? How did we begin?

The process of transforming a cornfield into a \$27 million medical center began on June 1, 1954, when the University of Kentucky Board of Trustees authorized the establishment of a College of Medicine, subject to the provision of necessary funds by the Kentucky General Assembly. The 39-acre site chosen for the Medical Center was on the agriculture experiment farm, a part of the Lexington campus. In 1956, the General Assembly made an initial appropriation of \$5,000,000, and on May 28, 1956, the Board of Trustees adopted a resolution establishing a Medical Center — including the College of Medicine, the College of Dentistry, the College

of Nursing and University Hospital. Groundbreaking ceremonies were held December 10, 1957, and the Medical Sciences Building was officially dedicated on September 23, 1960. The first students for the Colleges of Medicine and Nursing were accepted in September 1960. University Hospital opened in April 1962, and the College of Dentistry enrolled its first class in September 1962.

The major responsibility for developing the Medical Center was delegated to William R. Willard, M.D., Dr. P.H., former dean of the Upstate Medical School of the State University of New York at Syracuse, who was appointed on July 19, 1956, as vice president for the Medical Center and dean of the College of Medicine. Dr. Willard had formal training in pediatries and public health, rich experience as a health officer, medical educator, and medical-center administrator, and — of special significance – long interest in the application of the social sciences to the fields of medical

education and medical care. To assist him, Dr. Willard assembled a planning staff that included another physician, a hospital administrator, an economist, a statistician, and a sociologist.

This group prepared a statement describing "A Philosophy of Medical Education," a document pertaining to objectives not unlike that written almost a decade earlier by Dr. Hale Ham at Western Reserve, and surely like many others written since. But it had a special emphasis that resulted in the establishment of two departments that became pioneers in their fields; behavioral science and community medicine. These departments will be reviewed in some detail after a look at excerpts from the statement of philosophy.

The objective of the medical school program is to educate the undifferentiated physician — one grounded in the sciences of medicine and prepared, with further training, to engage in the practice of general medicine or any of its specialties. We do not believe the physician who has just finished medical school is prepared to practice medicine without further training in good internship and residency.

Then followed the forerunner of a report entitled "Meeting the Challenge of Family Practice," prepared in 1966 by an *ad hoc* committee, chaired by Dr. Willard, on Education for Family Practice of the Council on Medical Education of the A.M.A.

We believe that students should be imbued with the philosophy of family practice so that they consider patients as members of the family unit. The physician should serve as a family health advisor, treating those illnesses for which he is competent and coordinating the services of specialists when they are needed.

Kentucky's own initial response to this challenge will be considered subsequently.

The statement continued:

There are important new elements which need adequate representation in the curriculum. Prominent among these are the behavioral sciences which help the physician to understand the social and psychological determinants of behavior. These provide new insights and tools by

which the physician can better understand the patient as a person. He can understand better the emotional overlay of organic problems and deal with them. He can understand himself better and how to use his talents in dealing with the patient as an individual. He can appreciate better the social and cultural forces which may be causing or complicating the patient's illness and he can learn how to deal with such forces for the benefit of the patient.

Such was the genesis of the first full-time Department of Behavioral Science in a medical school — long before Oliver Cope '28 alerted his colleagues to the subject. The sociologist on the planning staff was Robert Strauss, Ph.D., and he became chairman of this department. Dr. Strauss has since written extensively on the role of behavioral science in the medical curriculum, and I have drawn on his reports to provide a description of this department.

The Department of Behavioral Science was created to provide a strong organizational base for a faculty with sufficient status to permit development of both a basic program of teaching and research in the behavioral sciences, and a base for free and effective collaboration in teaching, research and administration with the faculty of other departments and units both within the Medical Center and in the University. Major objectives of the teaching program of the department include the selection of concepts, principles and methods from the various behavioral sciences that are believed to be pertinent to the education of a physician, and the presentation of these in ways that will be meaningful to medical students and compatible with their orientation to the biological and clinical sciences.

The department presents its material during a series of lectures and seminars during the first year. With the recent curriculum revision (see below) greater emphasis is being placed on small group exercises. The nine full-time faculty positions in the department presently encompass the fields of sociology, social psychology, cultural anthropology and statistics. Associate members of the department provide skills in demography, computer programming, and communication. The department's program also

draws upon concepts from economics, geography, history and political science, and maintains some liaison with physiologically oriented behavioral scientists who are members of other departments. The Department of Community Medicine recently assumed increasing responsibility for instruction in biostatistics, and behavioral science has contributed its senior statistician to the leadership of the Medical Center's computer facility.

The impact of the department's teaching programs for medical students (it also has courses for other Medical Center students) is difficult to assess — a situation not peculiar to behavioral science. As judged by its ability to attract research and training grants, and by its productivity, the department is an academic success. Between 1960 and 1967, its members authored 12 books and monographs, 13 book chapters, and over 100 papers. The subject doesn't yet appear on National Boards, but behavioral science would seem to be here to stay.

THE genesis of the Department of Community Medicine is found in the following excerpt from the basic document of philosophy:

The medical school is an institution of society created to satisfy certain social needs. As an educational institution its functions are defined primarily as teaching and research. It prepares people to provide medical services and seeks new knowledge to prevent, cure and alleviate disease. These are enduring responsibilities. However, as the health problems of society change, the character of the educational and research programs must change to meet them.

The medical school must know what the health problems of society are and the factors biological, sociological, cultural and economic — which cause or contribute to them. These will differ to some extent from one area to another. Because change is constant, study of these problems and factors must be constant. . . To know the health problems of the area, some members of the faculty must study them. They must study also the administration of health services. and delineate the problems which obstruct the provision of necessary and desired services. To accomplish this, the community must be utilized as a laboratory in which the medical school studies certain problems, just as the hospital ward or physiology laboratory must be utilized for the study of other problems.

Since the best teaching is by example, it is important for the student to observe and participate in the study of community health problems and to assist in the provision of community health services. This can be done satisfactorily only if the community has well developed programs of comprehensive scope. Thus, it becomes important for the medical school to help the community develop such services in the programs to which it has access, just as it is important for the medical school to develop an efficient and broad range of services in the teaching hospital.

Dr. Kurt Deuschle was the first chairman of the Department of Community Medicine. He and his colleagues, particularly Dr. Hugh Fulmer, published a number of papers on the department's development and curriculum. They state that the idea that led to their teaching program began on the Navajo Indian reservation in Arizona. Responsibility for medical care of the Indians had been transferred from the Bureau of Indian Affairs to the U.S. Public Health Service. On contract from the USPHS, a field health research project was set up on the Navajo reservation by the Department of Public Health at Cornell under the chairmanship of Dr. Walsh McDermott. Dr. Deuschle was director of the Navajo project, and Dr. Fulmer served as field director. They gave direct medical care to the Indians to warrant the conduct of operational and epidemiologic research. Among other activities, they developed the concept of the Navajo health visitor, an all purpose health technician serving under the public health nurse. Senior medical students from Cornell were assigned to the research project. The students had chosen the project as an elective, and their assignment consisted of field research and clinical work.

The idea that later led to the development of the program at Kentucky was generated by the attitude of these students who said, in effect, that "if this is public health, we like it." As a



Aerial view

result, Dr. Deuschle decided to see if he could create a teaching program that would stimulate and excite *all* medical students. His efforts were greatly strengthened by the provision of financial support and curriculum time unusual for a Department of Preventive Medicine at that time.

The major objective of the Department of Community Medicine has been to teach a clinical approach to the identification and solution of health problems of populations or communities. The curriculum that all students were required to take consisted of a 72-hour course in the sophomore year and a six-week community clerkship in the senior year. The sophomore course, now reduced to 51 hours, emphasizes epidemiologic principles and methods in both infectious and chronic disease problems using a combined lecture-seminar approach.

For six weeks, the seniors participating in the community clerkship are placed in a Kentucky community: the locus varying from urban to rural, north to south, east to west. The student is assigned to work under a physician. However, he or she is not in an orthodox preceptor relation to that physician, but rather is assigned through him to study the total health of the community.

The students use a four-fold approach. First, they work up individu-

al patients in the physician's office practice. Second, they conduct a number of family studies in the home to observe the relation of the immediate environment to health and disease problems. Third, they utilize a guide prepared by an expert committee of the W.H.O., somewhat modified, which outlines how to study the health of a local community. And fourth, they conduct an epidemiologic study on some particular disease or health problem in the community. These studies may be modest, but they serve to emphasize the scientific approach in attempting to answer a specific question or questions about a community health problem. In so doing, the student develops an appropriate design, obtains a proper sample if possible, and conducts the study, which may require physical exams or simple field tests, such as tuberculin testing or vitalometry. Finally, he writes up this material and presents it before his colleagues and the faculty during a seminar week.

To foster the appropriate approach to his community studies, each student is visited by a full-time faculty member from the department at least once a week while in the community. Thus there is a teaching-learning triad — student, local physician, and community medicine faculty member.

Dr. Deuschle and his staff were asked how students could learn good

medicine in an outlying community where the model may be a horseand-buggy approach from a bygone era. How could good habits be fostered by observing the operation of a decrepit health department and an overworked general practitioner in Appalachia? impoverished They answered that a sick community, implying stunted health resources in the face of tremendous medical need, can be diagnosed by the student, just as a sick patient is at the beside. The more acute or chronic the illness, the greater the potential challenge for the community minded student.

Another excerpt from "A Philosophy of Medical Education" is appropriate at this point.

If health needs are to be met, the necessary services must reach people. In our complex society, health services are being given increasingly through some form of social organization. Some physicians do not understand in historical perspective what is happening in the social organization for medical services. Some are unfamiliar with available resources and do not know how to use them for the benefit of their patients, nor do they know how to work effectively with those responsible for the administration of health programs. . . . it is important for the student to observe and participate in the study of community health problems and to assist in the provision of community health services. This can be done satisfactorily only if the community has well developed programs of comprehensive scope. Thus, it becomes important for the medical school to help the community develop such services in the programs to which it has access. . .

The most recent, and still unique, program to evolve from such community orientation is the field professorship. The first, held by Dan Martin '52, was established in Madisonville under the sponsorship of a private practice group, the State Health Department, and the Department of Community Medicine. In this position, Dr. Martin serves as health officer, clinical epidemiologist, and participant in private group practice. In his combined role he makes the community population accessible to medical students and to residents in community medicine. Thus, a continuous study population is insured and

fresh ideas for solving community health problems are anticipated; academic, private and public health medicine are amalgamated.

A second field professorship was next established in conjunction with a community college in Somerset. (In Kentucky, the Community College System is administered by the University of Kentucky). Dr. Robert Gloor, the physician in this role, supervises senior students sent to that area for their clerkship, and coordinates the activities of the academic department with those of the practice of medicine and the health department in the community. He is currently developing an academic program for health technicians who would serve as "all purpose" aids for family physicians.

In July, 1968, two more field professorships were activated in Harlan and Hazard, with Drs. David Steinman and Joseph Alter, respectively, as incumbents. These physicians, both with special training in public health, are supported by the Southeastern Kentucky Regional Health Demonstration Project under the Appalachian Regional Commission, and hold regular academic appointments in community medicine. One is housed in a community college, the other in an Appalachian Regional Hospital a few miles from a community college. In this relatively deprived area, these "extension agents" are concerned with information gathering and analysis for program planning and evaluation, with training programs for health manpower, with

Sculpture of Duality



continuing education for the health professions, with acting as liaison to the Medical Center and with supervising medical students and residents. They return to Lexington at least once a week for rounds and seminars. The department has developed a proposal for an "urban" field professor, a proposal which is in that "approved but not funded" category so common these days. It is too early to assess the impact of this imaginative program, but the field professors and their satellite areas are being watched with interest.

Concerning the two departments to which so much space has been devoted — behavioral science and community medicine — there are few quantitative measurements of the influence of their programs on Kentucky graduates. These young physicians are just now making career choices. Perhaps some comfort can be taken in the fact that the students — as yet — have not rebelled because the curriculum is not relevant to the changing health needs of the people. Of greater pertinence, possibly, is how much this community orientation has penetrated the rest of the faculty of the College of Medicine and the other components of the Medical Center. This will be tested as the medical school responds to the challenges voiced at the 79th meeting of the Association of American Medical Colleges, and the Medical Center responds to the acknowledged fact that, despite its stated objectives, it has no programs exemplify "comprehensive which medicine." Despite an expressed commitment to the philosophy of family practice, the first attempt to develop a residency program in family practice failed. Its proponents argue that it did so because no realistic model was established. And many think, rightly so; the efforts of the Department of Community Medicine have been directed toward observation and description (community diagnosis) rather than toward direct action that might improve the health care system (community treatment). Like all schools, Kentucky is now debating how best to discharge its obligations to society and to its own educational and research programs. The Medical Center "health team" is involved in these discussions, but it is too early to tell whether a model family practice, a neighborhood health clinic, a prepaid group praetiee, or all, or nothing, will emerge.

VHAT of the other departments and the rest of the curriculum? Dr. Hale Ham onee suggested to me that it was easier to undertake experiments in medical education in an old school, where departments are secure in their identity, than in a new one. Apart from behavioral science and eommunity medicine, Kentucky established the usual basic seience and clinical departments, and designed a rather conventional curriculum in which students progressed from one autonomous block to another. There were some differences: gross dissection was delayed until the third year; there was no Department of Microbiology (a situation recently remedied). The faculty revised the curriculum after five years, the new version being fully implemented in 1968. The revision ealls for a number of changes popular in many sehools, but it was not as sweeping as that introduced in some. The major changes were: reduction of student eontact hours by approximately 20 percent in the basic science years; elimination of most didactic teaching in the clinical years, but with inclusion of a new course in clinical pharmaeology in the third; added emphasis on interdisciplinary eourses; introduction of an elective program, beginning in the first year; adoption of a series of "pathways" in the fourth year so that each student can design a more individualistic program (gross dissection was moved to this year); a greater participation of faculty in counseling of students. (A great tragedy was the death in April, 1967, of Dr. Jerome Cohn, the man who spark-plugged the curriculum study, in an airplane aceident that also elaimed the lives of Dr. Richard Sweet, chairman of cell biology, and other members of the University faculty).

Understandably, there are rough spots in the latest version of the curriculum. Certain faculty members find it hard to accept the idea that everything they taught in the past should not now be covered in less time. Although the initial document on philosophy stated that "... the student should be introduced to the

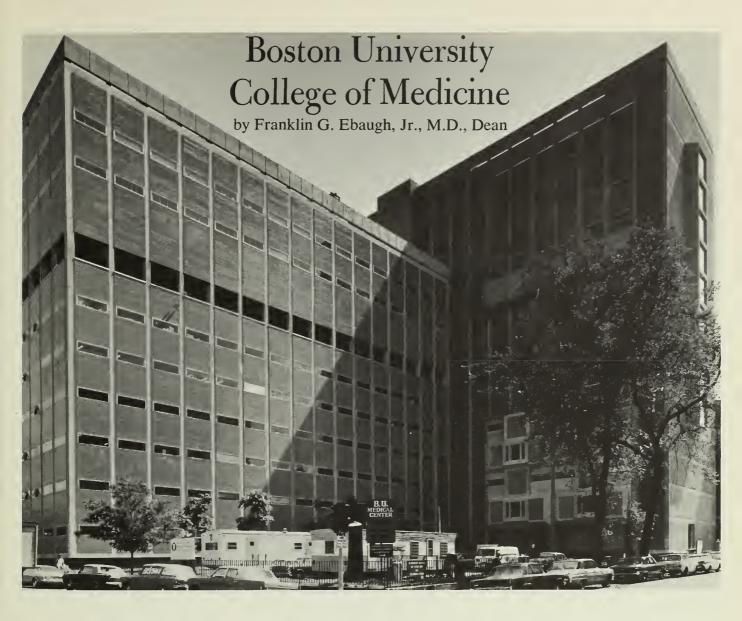
study of people early in his professional education, preferably in the first year," with formal teaching in this area being "reenforced by appropriate laboratory experience in which the student has contact with patients," patient exposure in the first year is still limited to conjoint conferences. The interdepartmental second year course, biology of disease, has been offered more as a series of sandwiches than as a blended entree. In the fourth year, clinical chairmen faced with students who have "elected" not to elect certain clinics, are already asking that the pathways be more restrictive; some are expressing enthusiasm for eliminating the internship. Such is the nature of change, change that will undoubtedly be accelerated by the recent call for action expressed in the series of AAMC recommendations on physicians' manpower and the medical school's responsibility for education and research in the organi-

zation and delivery of health services. The Medical Center has continued to grow. In 1966, the College of Pharmaey was added to the Center's organizational structure, and a new School of Allied Health Professions was created. With this increased administrative complexity, Dr. Willard gave up the deanship of the College of Medicine to devote full time to the Office of the Viee President. Dr. Tom F. Whayne served as acting dean until W. S. Jordan, Jr. '42, joined the staff in the fall of 1967. Under Dr. Whayne, who remains as associate dean, the first eurricular changes were instituted, and plans were developed for the eonstruction of a new Veterans Administration Hospital adjacent to University Hospital. In addition, the University was committed to eonstruction of a 10 million dollar building near the Medical Center to house the Thomas Hunt Morgan School of Biological Sciences, a building into which will move the several biology departments and the Departments of Biochemistry and Microbiology. These developments, plus eurrent plans to add two new floors to the Medical Center, will permit expansion of medical student enrollment from 80 to 100 per elass, hopefully by 1971. Given space and facilities, all that is needed is the faculty to do the job.

What of the faculty? A competent

years, and reeruitment has maintained a high standard. This success can be attributed, in part, to the fact that an exeiting Medieal Center was developed as part of a growing University in an attractive area in which to live and raise a family. Lexington is in the heart of the beautiful Bluegrass region of Kentucky, and has many of the advantages and few of the disadvantages of large urban centers. Nevertheless, faculty members do move onward; it is a tribute to Kentucky that most of this movement has been upward. Community medicine suffered a double loss in 1968: Dr. Deuschle moved to Mount Sinai to apply what he learned in a rural setting to the problems of Harlem; Dr. Fulmer accepted the Chair of Community Medicinc at the University of Massachusetts. Dr. Loren Carlson, the first ehairman of physiology and biophysics, is now assistant dean at the University of California, Davis, as ehief of seiences basie to medicine. Dr. William Knisely, first chairman of anatomy, is now Provost of the Institute of Biology and Medicine at Michigan State University. Dr. Edmund Pellegrino, first chairman of medicinc, is now developing a new Medieal Center at Stony Brook as Vice President for Health Seiences, State University of New York. Dr. Ben Eiseman, first chairman of surgery, and Dr. Charles Wilson, first chief of the division of neurosurgery, couldn't resist the lure of far away places, and are now at the University of Colorado and the University of California, San Francisco, respectively. Two young surgeons moved up to major chairmanships at other schools; Dr. Rene Menguy to the University of Chicago, Dr. Frank Spencer to New York University. As of this writing, apart from the recent vacancy in community medicine, these positions have been filled by other competent men whose growing programs are overflowing a handsome building eonsidered more than adequate just 10 years ago. The Dean's space eupboard, like his purse, is bare. Like all health related institutions, Kentucky awaits those developments that will determine whether or not it will have the resources to meet the educational, research, and service needs of the future.

group was assembled in the early



B OSTON University Medical School started as the New England Female Medical College in 1848 in the central part of the now standing Talbot Building that currently serves as the out-patient department of the University Hospital. This antecedent college was the first all-women's medical school in the country, if not the world. In 1872 the Female Medical College became co-educational and merged with Boston University, becoming the second member of the now sixteen colleges that comprise Boston University. At one time in the early 1870's Boston University was probably one of the most heavily endowed universities in the country. The endowment was wiped out overnight in the great Boston fire that caused the value of real estate and insurance companies, which constituted most of the endowment, to become suddenly valueless.

In 1910, Mrs. Evans made a gift to the then Massachusetts Memorial Hospital to further clinical research and investigation. Over the years this endowment has increased to \$18,000,000, making it possible for the Medical Center to develop a strong department of medicine, to build three Evans hospitals, the original sold to the Medical School in 1942, the current Evans building of University Hospital, and the future Evans hospital to be complèted in 1970.

In 1870, the Medical School built Building C and in 1890, Building B, which along with the old Evans hospital purchased by the Medical School in 1942, comprised the physical plant of the Medical School. By 1964 there had been no new construction of an instructional facility for 74 years and the physical plant

was so inadequate that a decision had to be made either to close the Medical School or to build a new facility. Accordingly, and simultaneously, preliminary plans were made, an application to the federal government for Health Manpower Construction was filed, and a campaign to raise funds was started. A new 7.6 million, fourteen story, instructional facility was constructed in time for the entering class of 1968 to use the first five floors of this new building. With the construction of this new facility we have increased our physical plant from a gross square footage of 202,000 square feet to 344,000 gross square feet. The numbers alone, of course, do not give the true significance since the new square footage excludes two old buildings, B and C, which have been torn down, leaving only Building A of the original three

medical school buildings.

The new instructional facility has a student cafeteria on the ground floor, two 130 seat lecture halls and the administrative offices on the first floor, home base teaching labs and supporting preparative labs on the second, third, and fourth floors with sufficient space to accomodate an entering class of 96 students, which represents a 33 percent expansion from our 72 entering students before the building was constructed. Floors five through eight inclusive consist of faculty offices and research labs, floor nine is unfinished, and floor ten contains a gross anatomy lab and additional offices and research labs for the Department of Anatomy. Floors 11, 12, and 13 house a new library that will have great educational impact, not only to the Medical School, but to the Medical Center as a whole. Before construction of this new library, the Medical School had only 2,500 square feet for its library and 80 reader seats. The new library will contain 30,000 net square feet, reader seats for 460, and capacity of 100,000 volumes. The house staff and staff of Boston City Hospital will be welcome to use its facilities as readers. Three floors were also added at a cost of 2 million in 1967 to an existing seven floor research building built in 1960. Other buildings currently under construction at the Medical Center are:

1. A new \$9,000,000 Evans building, to be completed in 1970, that will add 80 patient beds to the University Hospital, and a clinical research unit consisting of 10 beds and 40,000 net square feet of research space for the Department of Medicine. The structure will consist of 170,000 gross square feet.

2. The Commonwealth of Massachusetts has decided to build a \$16,000,000 Community Health Center on the grounds of Boston University Medical Center. This will allow the Medical Center to participate in an enormously expanded program in community mental health serving an area of 150,000 people in Roxbury, North Dorchester, portions of Back Bay, and South Boston.

3. A five-floor doctor's office building, to be completed in 1969, will provide housing for 80 doctors, making it possible for the full-time and geographical staff of the Medical Center to have

offices immediately on the Medical Center grounds instead of all over the city as now is the practice. This building will contain parking spaces for 280 cars.

4. The Medicenter, Inc., has built an intermediate care unit of 160 beds that is connected to University Hospital by a bridge across East Newton Street. The sum total of construction funds of all of the above programs is \$42,000,000.

5. A \$120,000 animal farm facility is being built at Millis.

In addition to the above, Boston City Hospital has completely renovated the children's building with a 1.5 million dollar program so that it is one of the finest facilities in the country.

Simultaneously with the construction of the new building, the curriculum at Boston University has changed. The time allotted to the basic science courses in the first two years has been decreased 20 percent and an elective period in the last part of the first year has been established for intensive laboratory experience in one specific discipline for three weeks. A new course, biology of disease, has been developed for the last half of the second year consisting of an interdisciplinary approach that correlates medicine, surgery, and the basic sciences in an organ block system. Renal disease will be discussed for ten days by all the members of the faculty of the Medical School who are experts in this area, whether they are basic scientists or clinicians. Physical diagnoses also will be correlated in this way, incorporating essential laboratory exercises and pertinent diagnostic studies.

The students will then be prepared to enter the third year, which is all clinical clerkships. The fourth year consists of a two-month clinical clerkship in psychiatry, and a one-month experience in home medicine, a course that has been offered for 93 years. The students serve as family doctors for the residents in the immediate community of Boston University Medical School. A cooperative venture between the Medical School and University Hospital, it has been one of the most successful of our educational programs; it is popular with the students, and it exposes them to the problems of the community in an effective and direct way. The remaining eight months of the senior year consist of one month's vacation and seven months elective time.

WE are now in our eighth year of a program leading to an A.B. and M.D. six years after graduation from high school. The students spend their first two years, including summer quarters, at the College of Liberal Arts taking specially constructed courses that are essentially honors courses. Fifty percent of the student's time is devoted to electives, thus enabling him to take the equivalent of a major in one of the humanities. This answers the criticism of many students in the program that they did not have a chance to go into depth in a particular discipline of their choice other than the required science courses.

Once in Medical School, the students have performed equally to the college graduate medical student as determined by class standing, national boards, attrition rate, quality of internships obtained, extracurricular activities, election to various student honor societies, and student government. Currently about 30 to 36 out of 96 students per class are in this program. This program is suitable only for the highly motivated student who relishes an intense program and hard work. The selection of students for this program poses unique problems. Care must be taken to exclude those students who are pushed into the program by undue parental influence. Even so, about 20 percent of the 40 to 45 entering students in the program change their minds about being a doctor or find the program too intense. We feel the program has been a success. The twelve years minimum time to produce a practicing M.D. after high school is needlessly long for a significant percentage of students. In my opinion, development of more programs aimed at ten years, such as our "six-year program," or even nine years should be actively pursued.

Over the past four years we have added 105 new faculty members. These have included five new chairmen of departments: Dr. Alan Peters, anatomy; Dr. Horace Gezon, pediatrics; Dr. Ephraim Friedman, ophthalmology; Dr. David Charles,



University Hospital

obstetrics, and Dr. David French, community medicine. We have, of course, suffered some grevious losses such as Franz Ingelfinger '36 to the *New England Journal of Medicine*, Sidney Gellis '38 to chair pediatrics at Tufts, Dr. Arnold Relman to chair medicine at Pennsylvania, and Norman Geschwind '51 to Denny-Brown's chair of neurology at Harvard.

Much progress has been made in hospital affiliations. In addition to the already established major ones at Boston City Hospital, Framingham Union, and the Boston Veterans Administration, we have established affiliations with full-time directors of key services at Malden, Brockton, and Carney.

One of the unanswered phenomena is how such a remarkable educational job was done here at Boston University over the last twenty years in such inadequate physical facilities. For the last ten years, despite the physical handicaps of the facility, we have been able to attract a first-rate faculty and our students have performed in the second quartile of the nation as judged by National Board and entering credentials. Our students are now performing in the top quartile of the nation as judged by National Board performance, being 11 out of 44 in Part I of National Boards and in a three-way tie for fifth place out of 40

schools in Part III of National Boards given last year to the Junior class.

Perhaps one of the most far reaching and significant developments at B.U. is the commitment of the school to serve as the professional component of the Roxbury Community Health Center. The community center was conceived and initiated by the Health Services Committee of the Roxbury Health Council which in turn asked B.U. to join them in a contract to deliver medical care to 32,000 people in the area defined by the proposal. OEO has committed a budget of 2.5 million. Dr. David M. French will become director of the project on July 1, 1969. Dr. French will also serve as professor and chairman of a newly established Department of Community Medicine at the school. The new clinic facility to be built will be owned by the Roxbury community. Basic policies will be established by the community. This is a unique arrangement, the first such in the country to be established by and with a community controlling the project.

The future decade will call for far more participation of medical centers and universities in community problems. In this particular arena Boston University Medical School is most fortunate to be affiliated with its parent University that contains several strong health related schools, such as the School of Nursing, School of So-

cial Work, Sargent College of Allied Health Sciences, the Graduate School, the School of Education, the College of Engineering, the Law School, as well as certain departments of the college of Liberal Arts, particularly sociology, psychology, and biology. Much needs to be done in bringing to fruition the integration of this enormous resource for health, and I am confident that the University will rise to this challenge.

Much progress has been made during the last four years at Boston University Medical Center; much needs to be made in the future. Further assessment and study of the curriculum to make it more flexible and contain more elective time, particularly in the first two years, is necessary. The future of Boston University Medical School would appear bright indeed if one accepts the premise that any institution's future basically lies in the quality of its students which, in turn, reflects the quality of the faculty and facilities. There is no doubt that Boston University Medical School is a better medical school for being in the same city as Harvard and Tufts Medical Schools. The juxtaposition of these three schools and the relatively small geographical setting has created an exciting medical environment for faculty and students alike without parallel in this country, if not the world.



Two-hundred miles to the northeast of Moscow, near the old rival capital of Vladimir, rural life offers a marked contrast to the bustle of the metropolis. Television antennas notwithstanding, chores are many, conveniences few.



The walled monastery town of Zagorsk, some 50 miles east of Moscow, boasts a rich ensemble of Russian ecclesiastical architecture. The gilt onion-shaped domes of its many churches dazzle the unaccustomed eye.

The "holy water" of Zagorsk is still much prized. Armed with milk jugs, thermos bottles, and medicine phials the faithful queue up at the sacred font.

INVASION

by David A. Rottenberg '69

The comings and goings of invading armies and the upheavals of revolution and civil war have left their mark on the physiognomy of Mother Russia; her soul, however, remains inviolate. Thus, for better or for worse, much of the flavor of traditional Russian life endures. To sample it, one need only turn off the high road.



S the British European Airways Comet in which I was travelling veered eastward over Vilna and began to encroach on the Soviet heartland, I glanced down at a washedout-green expanse of forest land, delimited only by the meanderings of a wide, muddy river, and reflected momentarily on the fact that in Russian the word "country" can be translated in a variety of ways - each communicating specific emotional or historical nuances. I searched in vain for a neutral noun to substitute for the rather nondescript panorama unfolding slowly below. Four years previously, almost to the day, I had driven through the same forest with the same destination, and I wondered self-consciously if Moscow changed perceptibly during my short absence — if a restaurant meal still consumed two hours of one's day, whether the then chronic shortage of small change had finally been remedied, or if it was still safe to cross Gorky Street at night without looking either way.

Disembarking at Sheremetevo Airport I was immediately struck by the paucity of foreign aircraft, a forcible reminder of the continuing commercial isolation of the Soviet capital (where only two Western carriers arrive or depart on an average weekday). After collecting my baggage and passing through customs I hailed a taxi to take me into the city center, 25 kilometers distant. On the great Leningrad Highway we passed an abstract steel and stone monument in the form of a barrier or breastwork. In reply to my question the driver explained that it marked the furthest point of the fascist advance on Moscow during the Second World War. (I learned later that the German armies had, in fact, been turned back several miles to the north — the site of an earlier monument — and that the new memorial had been erected for the benefit of Western travellers arriving at Sheremetevo.)

On Wednesday morning, August 21, I awakened to the discordant music of commuter buses and overloaded *gruzy* (Russian trucks). It was uncomfortably close in my room, and, consequently, I hurried down to breakfast without the benefit of the morning news summary. At the newspaper kiosk in the lobby I looked in

Mr. Rottenberg entered the Soviet Union in August, 1968, as a participant in the US-USSR Cultural Exchange Program. He was compelled to leave Russia unexpectedly in October when his placement in the First Moscow Medical Institute was revoked by the USSR Ministry of Higher and Specialized Education.

vain for *Pravda* and settled eventually for *Krokodil*, a satirical review best described as an unintentional cross between *Punch* and *Mad*. That *Pravda* had not yet arrived at the newsstand (it was nearly sold out when I arrived at the same hour on the previous morning) occasioned only a fleeting, impolite comment on the unreliability of hotel newsagents.

Still marvelling at the eupeptic effects that a breakfast of grainy caviar and Georgian cognac (in nearly equal quantities) seemed to exert on a pair of burly Vladivostok factory managers, I left the hotel. After a brisk ten-minute walk, during which I was fascinated by the sounds and smells of the Soviet capital, I arrived at the American Embassy. The steel shutters and scarred, ink-stained walls of this building — the stigmata of numerous "spontaneous" protest demonstrations — seemed to enliven the slate-gray Stalin-gothic facade. The two Soviet policemen "guarding" the entrance saluted jauntily at my approach; they served as supernumerary security officers to prevent Russian citizens from trespassing on the diplomatic compound. On several occasions in the recent past, however, Embassy personnel had observed the guards displaying inordinate zeal in

carrying out their commission, at the expense of miscreant ribs and nasal cartilages.

Unperturbed by these reflections I entered by the northernmost door and went to the Cultural Section. In the lobby I was greeted by a scene of noisy confusion. Small groups of Americans, mostly Embassy employees, were gathered around a bulletin board in front of the consular office, where six-foot-long sheets of green teleprinter copy were hanging. New broadsides appeared at frequent intervals, and the excitement mounted audibly as each was posted. Although the text was remarkably garbled and desultory, its import was unmistakeable; what most well-informed diplomatic sources had only the day before dismissed as absurd or unthinkable was by then a foregone conclusion the Soviet-led invasion of Czechoslovakia. The Consular Section was alive with rumors and speculations (that Kosygin had resigned, that Dubcek was dead, that the US might intervene), and the cultural attaché was locked in his office listening to the latest news from Radio Prague on a portable short-wave receiver.

That evening I dined in the *professorskaya* (literally "professors' dining room" — actually, a slightly better,



Young and old worship side by side in Zagorsk's Uspenskii (Assumption) Cathedral. The bowed heads and flickering candles within recall the Russia of Lermontov and Pushkin.

more expensive version of the student cafeteria) at Moscow State University with a group of my fellow exchangees. Our conversation frequently turned to the events then taking place in Czechoslovakia, the possible effect of these on Soviet-American relations and the fate of the Cultural Exchange, and the inevitable political repercussions of the invasion in Africa and Asia. Pravda had finally appeared — six hours late — featuring a front-page TASS dispatch; several turgid paragraphs in bold-face type sufficed to explain that a group of unnamed Czech "patriots" had urgently requested the assistance of the Soviet Union and the Peoples' Republics of Germany, Hungary, and Bulgaria in preventing "anti-party elements" from betraying democratic socialism in Czechoslovakia. Moscow radio and television commentators had already begun to describe the treacherous activities of counterrevolutionary forces in Prague and other major cities, abetted by West German agents and saboteurs. After dinner several of us adjourned to an exchangee's room on the seventh floor of Zona B, a dormitory wing.

For the first time in the twelve-year history of the US-USSR academic exchange, the Americans, who had always been compelled to live in the university dormitories, were segregated on two floors of Zona B. A few of the single scholars were paired with Russian *aspiranty* (graduate students) specializing in American history or literature; most of the others

shared their two-room *blok* with Africans or other non-Russians. Zona B was also inhabited by British, Canadian, and Scandinavian scholars and a large contingent of North Vietnamese — often strategically billeted opposite their American comrades.

This society was frequently enlivened by the presence of a gregarious young Russian undergraduate named Sasha, who sported a pair of old "levi's" and a McCarthy-for-president button; he spoke colloquial American English and evinced an insatiable curiosity about "the latest news from Czechoslovakia." Another interloper named Tanya was occasionally present. A would-be American exchange student, she claimed in her grammatically flawless English to have been educated in Connecticut, to have worked in the American Embassy, and, more recently, to have arranged a course of study at MGU (Moscow State University) with the Soviet Ministry of Higher Education. Sasha turned out, not surprisingly, to be a Komsomolets (a member of the Young Communist League) and Tanya was thought by the Embassy — she had never worked there — to be a by-product of the American emigration to the USSR in the 1930's. Indeed, when questioned closely about her alleged college days in Connecticut she was unable to provide more than a novelist's account of contemporary American campus life.

Crossing the central foyer on our way to Zona B we passed the foreign

students' notice boards. North Vietnamese, Arab, African, and Latin American revolutionary student organizations invited all interested parties to attend discussion groups, protest meetings, and social gatherings. One of our number recalled how, following the assassination of Robert Kennedy several months earlier, the American students had managed to secure a large black-and-white photograph of the senator from the Embassy and post it on one of the notice boards. Although the photograph was torn down by a group of Arab students, it was promptly restored by Russian undergraduates, who later contributed a bouquet of roses to the memorial display.

As we sat around a portable shortwave receiver listening to the Eastern European Service of the BBC, it was easy to imagine how the captive millions of occupied Europe must have felt 25 years before as they listened in basements and garages to the chimes of Big Ben and the solemn pronouncement, "This is London." In spite of the disturbing news from Prague and the animated discussions that followed and, no doubt, in consequence of the generous jiggers of Hunters' Vodka dispensed periodically by our host, I gradually succumbed to the unreality of the situation.

SEVERAL mornings after the events described above, I flagged down a taxi on Kutuzov Prospect and asked the driver to take me to the Hotel Rossiya. All Moscow was in a turmoil that morning because of TASS allegations of Green Beret activity near Prague, the discovery of large arms caches in Western Bohemia, and intolerable "provocations" attributed to counter-revolutionary terrorists and West German agents. As we were nearing the Arbat Metro Station, a Radio Moscow news commentator interrupted a light music program to report the latest anti-socialist outrages in Prague. My driver leaned over to turn up the volume. "Mozhno?" (May I?) he queried, fully conscious that I was a foreigner.

Within five minutes the dire intentions of the revanchist cliques in Bonn and the militarist-imperialist circles in Washington had been revealed to the peace-loving Soviet masses, and the music program was resumed with a thoroughly Russianized version of "The Umbrellas of Cherbourg." After having listened attentively to the brief but spicy recital of counter-revolutionary atrocities, my driver launched into a petulant tirade against German imperialism and fascist warmongering. Leaving no doubt about the intensity of his political and moral convictions, he concluded his outburst by striking a clenched fist on the dashboard and exclaiming "Novyi Stalingrad — ne budet!" (Another Stalingrad - never!") Muttering about the awful consequences of West German irredentism, he lapsed into an illhumored silence. I was struck once again on this occasion by the facility with which the Russians distinguish between the West Germans and their East German brethren; one is led to believe that the East Germans are not Germans at all but rather Germanspeaking Poles or Bulgarians. Ironically, in spite of their "revanchist," "neo-Nazi" ideology, the West Germans are remarkably well represented in Moscow — diplomats, businessmen, tourists, and even a graduate student or two at MGU.

The Rossiya, Moscow's newest and, according to Intourist, Europe's largest hotel, adjoins Red Square and abuts on the Moskva River. A vast quadrangular monument in glass and marble, faintly recalling the classic lines of the Kremlin Palace of Congresses, it obtrudes irreverently on the weird majesty of St. Basil's and the Kremlin proper. Playing host to a polyglot procession of tourists, trade delegates, journalists, convention delegates, and visiting dignitaries, the Rossiya boasts numerous "first-class" restaurants (inevitably crowded with convivial Moscovites), a large Beriozka shop (a "dollar department store" where luxury goods unobtainable for rubles in ordinary Russian stores are sold to tourists and diplomats for "hard" foreign currencies), and an excellent Western-style jazz band complete with seductively bespangled songstress. Although not officially sanctioned by the hotel administration, a number of other services are made available to the clientele by enterprising Georgians, Uzbeks, and Azerbaijanis (the "currency speculaPokrov na Nerli (Shelter-on-the-Nerl), an architectural gem turned tourist attraction, stands as it has for centuries in a lonely field near Suzdal. No longer used for religious services, its simplicity and elegance still inspire the imagination.

tors" and "petty criminals" of *Pravda* fame), most of whom abandoned the more decorous Hotel Ukraina in favor of the newer, posher Rossiya.

When I entered the dollar shop I was accosted by a pre-revolutionary doorman encumbered by an outsized army-surplus greatcoat, almost certainly purchased in a local "commis-(second-hand) store. "Valyuty?" (foreign exchange), he asked perfunctorily, but with the dignified air of the gainfully employed. On receiving my answer in the affirmative, he frowned slightly and motioned me into the temple. In spite of its veneer of exclusiveness the Rossiya's Beriozka shop was, like most of Moscow's emporia, conspicuously overcrowded and understaffed. Eager consumers, the majority of whom were Russians, vied with one another, often physically, for the attention and assistance of the beleaguered sales personnel. Queuing to select, queuing to pay for, and queuing to receive my purchase of three Japanese flashlight batteries consumed the better part of an hour.

Equally as impressive as the amount of time required for each transaction, however, was the variety of foreign exchange — dollars, pounds sterling, francs, and West German marks — which Russian patrons disbursed for expensive English toys, Japanese tape recorders, and French cigarette lighters. I later learned there were four basic sources of this hard currency: foreign exchange vouchers issued to Russian employees in foreign embassies;



black-marketeering; tips received in hotels and Intourist restaurants; and Western currencies purchased by navy or merchant seamen in foreign ports. As a result, rubles, though not freely convertible on European exchange markets, are readily available in many commercial centers at one-half to one-third of the artificially established parity of R1.00 equalling \$1.10. In addition, many of the dollars sent by Americans to their Russian (often Latvian or Lithuanian) relatives eventually change hands in Moscow's Beriozka stores.

Having purchased my batteries I decided to visit a well-known bukinist (second-hand book dealer) on the Old Arbat. I crossed Red Square and walked toward the Manege, recently rechristened the Central Exhibition Hall. A mile-long queue in the Kremlin gardens was snaking its way slowly to Lenin's Tomb. Opposite the Central Exhibition Hall I boarded a Number 2 trolleybus and continued along Kalinin Prospect — past the Lenin Library with its marble pillars and high windows, past the Zoological Museum where I attended Russian classes, past the Army Store, and, finally, on arriving in Arbat Square, past the much-frequented Praga Restaurant. Where less than a week before an advertisement for "Czechoslovak specialties" had been prominently displayed in a lowerstory window, large decorative lettering now proclaimed to the Soviet capital a new menu featuring, of all things, "Russian cooking."

EDITORIALS

Twenty Years Later

Twenty-four years ago, Harvard Medical School, one of the last of the exclusively male medical strongholds, flung open its hallowed portals and admitted women. As with all hallowed portals, the hinges on these were rusty, so that the "fling" was accompanied by some loud creaking the creaking being the noise of male protest from students, alumni and faculty alike. The protest was composed primarily of two objections to this rash venture: first, that the women who would come to Harvard Medical School, while ostensibly wanting to make a career of medicine, in fact were coming primarily to find husbands; and second, that women, no matter how sincerely they wanted to be doctors, would fall victim to their own feminity and eventually forsake medicine for the housewifely duties of marriage and motherhood.

Now, 20 years after the first women graduated from HMS, it seems appropriate to reassess the dire prediction made in 1945. In reference to the first — regardless of the primary motive that impelled the women to attend medical school, it seems that one excellent fringe benefit was the availability of men, since 85 percent of all women who attend HMS have married. Fifty percent have married physicians, and 35 percent indeed have married Harvard Medical School physicians, thus giving credence to the prophecies of 24 years ago.

Although it seems that HMS has been a good place for girls to go looking for husbands, the women have certainly not stopped with achievement of this goal. Giving the lie to the second dire prediction, about 90 percent who matriculated at Harvard have remained active in some phase of the medical profession — in practice, community health, research, teaching, or some combination of these fields. This must compare favorably with statistics of the number of male graduates who remain active in medicine.

Women have shown preference for pediatrics, psychiatry, and internal medicine. This may be because their feminine talents tend to make them more attractive to these "gentler fields." This also may be because these fields have been more willing to accept women — making internships and residencies more readily available to them than did other medical specialties. It is ironic that not one Harvard Medical woman graduate, to our knowledge, has specialized in obstetrics and gynecology — a field in which there is a large public demand for women doctors. Probably the main reason for Harvard's women not entering this field has been the reluctance, so far; on the part of Harvard's surgical services to give internships and residencies to women. Some of the hallowed portal hinges are still in need of lubrication!

A number of Harvard women have carried on with the Harvard tradition of teaching medicine, since over half of the female graduates have academic appointments in various medical schools, with a significant scattering of associate and assistant professors.

Thus women have abundantly proved that Harvard's investment in them has paid very good dividends for medicine. But what about the women themselves — have they had to sacrifice in their own personal lives to maintain their careers as doctors? Have medicine, marriage, and motherhood been easily compatible? Most of the women have succeeded in combining all three, but not without difficulty. Unlike other minority groups,

women in medicine have made no demands, organized no protests or demonstrations. They have asked for no special considerations because of their unique problems of conflict between careers as doctors and as homemakers. They have been willing to make it in a man's world, living up to the standards set up by males in a predominantly male profession. Perhaps they should make a little noise, voice some protests.

This 20th anniversary should be an occasion for recognizing the demonstrated ability of women who have graduated, and at the same time recognizing that on many occasions their past could have been made easier had greater consideration been given to their dual duties to profession and family. Perhaps this anniversary could be used as a time for discussion of "how" to improve the situation for future women doctors during their medical school and working years. Clear-headed guidance from high school to postgraduate work, acceptable part-time training and jobs with adequate salaries, day care centers for children of women medical students and doctors, tax allowances for domestic help — all of these factors and many more should be given careful consideration.

From the point of view of equal opportunities for the sexes, the barriers against women set up by certain of the specialties should be investigated. Admission to all specialties should be on the basis of capability, not on the basis of race, color, creed, — or sex.

It is hoped that the present ferment in medical education will offer new concepts, new solutions, and above all, new opportunities to the woman who has chosen to become a physician.

> Doris Rubin Bennett '49 Raquel Eidelman Cohen '49 Iolanda Einstein Low '53

The Unwed Mothers

The problem of what to do about the unwed teenage mother has been with mankind for centuries. Only in the last few years has this problem been discussed openly, and plans made for the proper care of girls who found themselves in this dilemma. In the past, maternity homes have been available only to very rich families who could afford to conceal their daughter's "mistake." Now, however, with the increase in population and

VOTE

for THREE CANDIDATES for

HARVARD MEDICAL ALUMNI COUNCIL

1969-1972



RETURN BALLOT TO: Alumni Office

Harvard Medical School, 25 Shattuck Street

Boston Massachusetts 02115

BY 12:00 NOON

FRIDAY, MAY 23, 1969

JESSE LAWRENCE CARR '27

San Rafael, California

S.B. (University of California) 1923

1927-1928 Intern, Long Island College Hospital, Brooklyn

1928-1929	Assistant Surgical Resident, University of California School
	Medicine
1929-1947	Resident to Instructor to Assistant Professor of Pathology,
	U.C.S.M.
1932-1967	Visiting Pathologist and Chief of Service, San Francisco
	General Hospital
1939-	Pathologist and Director of Laboratories, Shriners Hospital
	for Crippled Children, San Francisco
1944-	Lecturer and Chairman, Department of Legal Medicine,
	U.C.S.M.
1947-1949	Associate Clinical Professor of Pathology, U.C.S.M.
1947-	Pathologist and Director of Laboratories, Chinese Hospital,
	San Francisco
1949-	Clinical Professor of Pathology, U.C.S.M.

Professor of Legal Medicine, U.C.S.M.

Pathology; Ethics Committee, College of American Pathologists.

Past President: California Society of Pathologists; Member: College of American Pathologists; American Society of Clinical Pathologists; American Association of Pathologists and Bacteriologists; International Academy of





ת

1949-



CURTIS PROUT '41

Dover, Massachusetts

A.B. (Harvard College) 1937

1941-1942	Intern in Pathology, Boston City Hospital
1942-1943	Intern in Medicine, Peter Bent Brigham Hospital
1943-1944	Assistant Resident in Medicine, Johns Hopkins Hospital
1944-1945	Research Fellow in Medicine, Massachusetts General Hospital
1945-1947	Assistant in Medicine, M.G.H.
1946-1961	Private practice of internal medicine
1947-1961	Assistant to Instructor in Medicine, H.M.S.
1947-1965	Assistant to Instructor in Medicine, P.B.B.H.
1961-	Clinical Associate in Medicine, H.M.S.
1961-	Associate Director and Chief of Medicine, Harvard University
	Health Services
1966-	Senior Associate in Medicine P.B.B.H

Diplomate: American Board of Internal Medicine; Fellow: American College of Physicians; Member: American College Health Association; New England College Health Association, President 1965-66; Aesculapian Club of Boston, President, 1966.

JOHN LEEMAN LEWIS, JR. '57

Tenafly, New Jersey

A.B. (Harvard College) 1952

1957-1959	Intern and Assistant Resident in Surgery, Massachusetts General
	Hospital, Boston, Massachusetts.

1959-1961 Clinical Associate, Endocrinology Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

1961-1962 Assistant Resident in Surgery, Massachusetts General Hospital, Boston, Massachusetts.

1962-1965 Resident in Obstetrics and Gynecology, Boston Lying-in Hospital and Free Hospital for Women, Boston, Massachusetts.

1965-1967 Senior Investigator, Surgery Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland.

Associate Professor of Obstetrics and Gynecology, Cornell

Medical College, New York, New York.

1968- Lecturer in Obstetrics and Gynecology, Columbia University, College of Physicians and Surgeons, New York, New York.

1968- Associate and Associate Member, Sloan-Kettering Institute for

Cancer Research, New York, New York.

1968- Attending Surgeon, Chief, Gynecology Service, Memorial Hospital for Cancer and Allied Diseases and James Ewing

Pavilion, New York, New York.

1968- Associate Attending Obstetrician and Gynecologist, New York

Lying-in Hospital, New York, New York.

Member: American College of Obstetricians and Gynecologists; Boylston Medical Society; Medical Society of the County of New York; New York Cancer Society; New York Gynecological Society; Society for Gynecologic Investigation; Society of Gynecologic Oncologists.







1968-



TENLEY ALBRIGHT GARDINER '61

Brookline, Massachusetts

(Radcliffe College) 1957

1961-1963 Surgical Resident, Beverly Hospital

1963- Practice of general surgery at New England Baptist Hospital,

New England Deaconess Hospital and Whidden Memorial Hospital

Member: American Medical Association; American College of Sports Medicine; Massachusetts Medical Society; Honorary Chairman: Massachusetts Association for Respiratory Diseases, 1966; Big Sister Association, 1967-1969; Chairman: Medical Committee of Girls Clubs of Boston, 1968-1969.



JOHN ALBERT SCHILLING '41

Oklahoma City, Oklahoma

A.B. (Dartmouth College) 1937

1941-1942	Intern in Surgery, Roosevelt Hospital, New York City.
1942-1944	Resident Surgeon, 1st and 2nd Surgical Divisions, Roosevelt
	Hospital.

- 1944-1948 Instructor in Surgery, University of Rochester School of Medicine and Dentistry, Rochester, New York.
- 1944-1953 Assistant Surgeon, Strong Memorial Hospital and Rochester Municipal Hospital.
- 1945-1946 Surgical Pathologist, Strong Memorial Hospital and Rochester Municipal Hospital.
- 1948-1953 Assistant Professor of Surgery and Surgical Anatomy, University of Rochester School of Medicine and Dentistry.
- 1953-1955 Head, Department of Surgery, School of Aviation Medicine, Randolph Field, Texas. Active Duty, USAF, MC.
- 1955-1956 Assistant Professor of Surgery, University of Rochester School of Medicine and Dentistry. Assistant Surgeon, Strong Memorial Hospital and Rochester Municipal Hospital.
- 1956- Professor and Head, Department of Surgery, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.
- 1958- Advisory Board (Editorial), THE AMERICAN JOURNAL OF SURGERY. Member of the Editorial Boards of: SURGERY (1962); ANNALS OF SURGERY (1966).
- Consultant to the Division of Hospital and Medical Facilities,
 Department of Health, Education, and Welfare.

Chairman: Army Medical Research and Development Command's Advisory Committee; The American Board of Surgery, Inc.; Board of Scientific Counselors, National Cancer Institute. Governor: The American College of Surgeons.



C

D

THOMAS FRANKLIN WILLIAMS '50

Rochester, New York

B.S. (University of North Carolina) 1942, M.A. (Columbia University) 1943



950-1951	Intern in Medicine, Johns Hopkins Hospital
951-1953	Assistant Resident Physician, Johns Hopkins Hospital
953-1954	Senior Resident Physician, Boston V.A. Hospital
954-1956	Fellow in Medicine, University of North Carolina
954-1968	Instructor to Professor of Medicine and Preventive Medicine,
	U.N.C.
968-	Professor of Medicine, Preventive Medicine and Community

Health, and Radiation Biology and Biophysics, University of

Rochester

1968- Medical Director, Monroe Community Hospital, Rochester

Diplomate: American Board of Internal Medicine; Fellow: American College of Physicians; American Public Health Association; Member: American Federation for Clinical Research; Southern Society for Clinical Investigation; Society for Experimental Biology and Medicine; American Diabetes Association; American Association for the Advancement of Science; Association of Teachers of Preventive Medicine.

CLEMENT ARTHUR HIEBERT '51

Portland, Maine

A.B. (Bowdoin College) 1947

1951-1956	Intern to Assistant Resident, Massachusetts General Hospital
956-1957	Harvard Research Fellow, Cambridge, England
957-1958	Resident, M.G.H.
958-1959	Senior Registrar in Thoracic Surgery, Frenchay Hospital,
	Bristol, England
958-1959	Assistant in Thoracic Surgery, Bristol Royal Infirmary

1959-1960 Director, Surgical Clinics, M.G.H.1959- Clinical Associate in Surgery, M.G.H.

1959- Assistant in Surgery, H.M.S.

1960- Attending Surgeon, Maine Medical Center, Portland, Maine.

Diplomatc: American Board of Surgery; Board of Thoracic Surgery; Fellow: American College of Surgeons; Member: Boylston Medical Society; Cumberland County Medical Society; Maine Medical Society; Maine Thoracic Society; Board of Directors, Maine Heart Association; Medical Advisory Committee, Maine Department of Health and Welfare.



E

F



CHESTER MIDDLEBROOK PIERCE '52

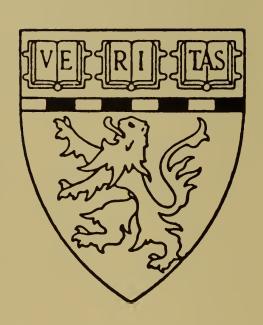
Boston, Massachusetts

A.B. (Harvard College) 1948

1952-1954	Intern and Resident, University of Cincinnati
1954-1956	U.S. Navy Medical Corps
1956-1960	Resident to Instructor, University of Cincinnati
1960-1968	Assistant Professor to Professor of Psychiatry, University of
	Oklahoma
1968-1969	Alfred North Whitehead Fellow, Harvard University

1968-1969 Affred North Wintenead Fellow, Harvard University
Professor of Education and Psychiatry, Harvard University

Diplomate: American Board of Psychiatry; Fellow: American College of Physicians; American Psychiatric Association; Chairman: American Psychiatric Association Committee on Academic Education; Senior Consultant: Peace Corps; Office of Economic Opportunity; Member: Antarctical Society; American Polar Society.



concentration of low-income families in large cities, we have come to recognize the special needs of this particular group of adolescents, and have started to do something about them.

The magnitude of this problem is startling to anyone unfamiliar with the birth statistics of an urban community. In the city of Wilmington, Delaware, in 1968, 460 out of 1,000 live births were illegitimate. Forty percent of these babies were born to mothers 16 years of age or younger. Many of these young girls arrive at a hospital for delivery, never having received any prenatal care. The rate of prematurity, neonatal deaths, and maternal complications in this young age group far exceeds the average.

During the past five years, many clinics have opened across the country, devoted to the care of the pregnant unwed teenager. These clinics provide comprchensive care to girls from the time the diagnosis of pregnancy is made until sometime after the baby is born. In most programs, this care includes not only medical needs, but provides continuing education and consultation services from social workers, lawyers, and clergymen, as well as day care for infants. The success of this multidisciplinary approach has been rewarding. In the Cincinnati Adolescent Clinic, the course of 100 such patients was analyzed and compared to a control group of 83 girls of the same age and socio-economic background, who did not receive this care. The incidence of prematurity was reduced from 26 percent in the control group to 10 percent in the group receiving care. The rate of recidivism 15 months after delivery was reduced from 45 percent to 15 percent.

In the Yale-New Haven program in the 1965-66 study, only one girl had a repeat pregnancy, whereas, "In the ordinary course of events, at least a dozen of the girls would now be pregnant again." In Syracuse, New York, after a year of operation, "there was not a single case of mortality or morbidity as might be expected in this high-risk group." And throughout the country, these reports keep repeating the efficacy of this approach to the problem.

In an attempt to correlate the many services relative to this unique problem, it is easy to forget the real goal of these programs — the rehabilitation of the young mother herself, based on her own feelings. How does she feel about her pregnancy, why did she become pregnant, was it an accident or was it really an expression of her adolescent rebellion against her parents? How will she cope with the immediate emotional problems of her pregnancy?

Dr. Kaltreider, in her perceptive article published in this issue of the *Bulletin*, has brought into focus the immediate needs of the young unwed mother who faces the many problems of her pregnancy. I hope wc can keep these firmly in mind in developing such programs, lest the girl herself be lost in a morass of too many advisers.

MARJORIE JANE MCKUSICK '49

Ladies of Salerno

The admission of women students to Harvard Medical School, after many years of intermittent effort, represents one of the very latest steps in gaining for the gentler sex its equal rights in respect to participation in the art and science of medicine. A more liberal view had been adopted in the eleventh century, at the University of Salerno, where the famed "ladies of Salerno" — Trotula, Abella, Rebecca, Constanza and others — were spirited and resourceful members of the faculty.

In more modern and consequently less legendary times, Elizabeth Blackwell, a native of Bristol, England, started the emancipation in this country by graduating in medicine from Geneva College in New York State in 1849, although Chicago's Rush Medical College, at which her sister Emily matriculated, was censured by the Illinois Medical Society and she was refused a second term. Meanwhile the New England Female Medical College was established in Boston in 1848 and merged with the Boston University School of Medicine in 1874; the Women's Medical College of Pennsylvania was incorporated in 1850, and eventually the Blackwell sisters with Dr. Marie Zabrzewska, created the New York Infirmary for Women and Children.

The gentlemen of the profession did not capitulate easily, however, as was demonstrated in the case of Susan Dimock, who had been a student at the New England Hospital for

Women and Children, in Roxbury. She transferred to the University of Zurich where she received her medical degree in 1871 and in the same year assumed charge of the New England Hospital, establishing there the first training school for nurses in America. In 1872 she applied for admission to the Massachusetts Medical Society, and despite her eligibility under the terms of the Society's incorporation, was rejected. Although she and others tried repeatedly, no woman was admitted until 1882. Dr. Dimock, tragically, was lost in a shipwreck off the coast of England in 1875, aged 28, and the street on which the Boston Hospital still stands was named for her.

Britain was even more conservative in accepting the idea of female physicians and it was not until 1865 that Elizabeth Garrett was granted a diploma from the Society of Apothecaries and 11 years more before Edinburgh, the first university to capitulate, awarded a medical degree to Sophia Jex-Blake. Even before her graduation she and Dr. Garrett had been successful in establishing the London School of Medicine for women

In recent years, one of the chief complaints of Britain's Salernic ladics, particularly the married ones, has been the failure of the Ministry of Health to provide sufficient part-time employment for those who have worked so hard to qualify and whose services are so greatly needed.

HARVARD MEDICAL ALUMNI DINNER

During Meetings of AMA
HARVARD CLUB—NEW YORK
Monday, July 14, 1969
Further Information Will Follow

ALONG THE PERIMETER

First New Academic Building at HMS in 63 Years

Ground will be broken in July, 1969, for a new six-floor and basement structure to house the Harvard Medical School's Laboratory of Human Reproduction and Reproductive Biology.

The \$4.5 million limestone-faced building, with 64,500 square fcet of gross floor space, will be located between the administrative buildings of HMS and HSPH along Shattuck Street. It will join at the rear with Building C. Designed by Architects Collaborative of Cambridge, the building is scheduled for completion in August, 1970.

The Laboratory's ground floor will provide seminar and conference

rooms as well as administrative offices and special purpose rooms. The four upper floors will be devoted to laboratory and office quarters. Facilities for animal research will be on the top floor. The Laboratory will also house data processing equipment to be linked with the Harvard Computing Center in Cambridge.

No provision for outpatient clinics or accommodations for inpatients will be incorporated into the Laboratory.

Major funds for the construction of the Laboratory have been provided by the Ford Foundation, the Avalon Foundation and the USPHS. A \$2 million grant from The Rockefeller Foundation will be used for support of the faculty and staff over a 10-year period.

Dr. Roy O. Greep, John Rock Professor of Population Studies in the Faculty of Public Health and a member of the Department of Anatomy, HMS, will direct the Laboratory.

The Laboratory of Human Reproduction and Reproductive Biology will function as an interdisciplinary center bringing together scholars of widely divergent backgrounds and skills, but with similar research interests from the Medical School, School of Public Health, Faculty of Arts and Sciences of Harvard University and possibly from other institutions in Boston, such as M.I.T.



Health Careers Summer Program Launched

A Health Careers Summer Program to increase the pool of qualified applicants to medical and dental schools from among minority and other disadvantaged groups will be undertaken this summer by Harvard Medical School and Harvard School of Dental Medicine with the cooperation of the Harvard Summer School.

The initial grant to launch the program has been made by the Josiah Macy, Jr., Foundation of New York. Financial support for the continuing program is actively being sought from private and government sources.

The program is believed to be the first of its kind to be initiated by private professional schools. The format will be similar to that of the Intensive Summer Study Program for high school students from similar backgrounds. An intensive recruitment campaign has been launched by the two Schools with primary concern being given to minority-group students in colleges from which most medical schools have not previously taken significant numbers of students.

Dean Ebert, speaking for both Schools, said the numbers of applicants admitted will be governed by available funds. Full expenses, including a \$500 stipend and a \$250 traveling allowance, will be available to those accepted. The total financial outlay for student expenses for the eight-week summer session (July through August) will be \$1,600 per student. Students will live in facilities made available by Harvard College.

The Health Careers Summer Program not only will enable those accepted to increase their final academic training needed for graduate education, but will involve a simultaneous exposure to the activities of hospitals, clinics and laboratories, as well as HMS and HSDM. The initial benefit of the program will be to enable students to more realistically assess the possibility of a health career.

Dr. Ebert noted that it is anticipated that the program will enroll more students than could be entered in either HMS or HSDM and thus will feed additional applicants to professional schools at other institutions. The program is also seen as an im-

portant step in the process of enhancing communications and interactions between the medical and dental schools and the predominantly black colleges in the nation.

Those who enter the program will be encouraged to participate for three summers following their freshman, sophomore and junior years in college. In the early years of the program it is anticipated that some will enter as upperclassmen. Provisions are being made to permit the entrance of high school seniors who have been admitted to colleges.

Two types of courses will be offered in the Health Careers Summer Program. One will involve those courses regularly taught in the Harvard Summer School with the addition of small group tutorials. The second portion will be of a clinical nature not involving the Harvard Summer School. The usual course load at the Harvard Summer School is one full course or two half courses.

Students will be encouraged to take a half course in the natural sciences or mathematics, with the tutorials.

The clinical portion of the program will take into consideration the fact that the participants may be unfamiliar with the activities of health careers. It is the purpose of the program not only to help increase students' academic preparation, but to provide experience that will be useful to them in deciding whether to choose such careers.

To afford some degree of continuity, individual students will spend much of their clinical time in the same facility. Their clinical tutors will be staff members of Harvard affiliated institutions. A variety of experiences will be offered including the opportunity to become a member of a clinical team. Ethical and social problems arising from the clinical activities will be subjects for group discussions.

Laboratory space will be available to students with strong interests in medical research. However, Dr. Ebert pointed out that research does not reflect the main emphasis of the program.

A preview of the total program will be given to those admitted during a week of intensive clinical orientation immediately preceding the opening of the Harvard Summer School. This will include hospital tours and discussions to demonstrate the diversity of ongoing activities in the general as well as in the specialty institutions, and will expose the students to a wide range of clinical problems.

Grant Aids Congenital Disease Research

The John A. Hartford Foundation, Inc., New York, has awarded the Children's Hospital Medical Center, Boston, a quarter-million dollar grant to aid congenital and inherited disease research.

The grant is to cover a three-year study in genetics and hematology. Inherited disease of the blood will be the primary focus of the research. Studies will be directed towards four objectives:

- 1. Investigating the extent and exact nature of the white blood cell's role in combatting infection and determining how inherited defects in these cells may prevent this function.
- 2. Uncovering the basic cellular abnormalities that cause several widespread and often fatal kinds of anemia, and thereby developing new methods of treatment.
- 3. Mapping the location of gencs,

- the basic units of heredity, on their chromosome carriers, and determining the function of each gene.
- 4. Developing tests of the presence of genes causing various inherited disease, including those which may not affect the carrier but which may be passed on to his children.

In the past, the Hartford Foundation has supported the CHMC researchers working in the field of congenital and inherited diseases. The new grant will be used primarily to finance research growing out of studies already completed.

Dr. Park S. Gerald, associate professor of pediatrics and chief of the Hospital's clinical genetics division, and David G. Nathan '55, assistant professor of pediatrics and chief of the hematology division, will lead the researchers.

Change in Focus Mandatory for Community Mental Health Center

Important changes in program focus accompany the transition from the mental hospital concept to that of the community mental health center. Any further evaluation of the community health center's role will depend on the recognition of these changes.

In a speech delivered at the annual meeting of the American Association for the Advancement of Science held in Dcc. 1968, Frank Baker, Ph.D., of the HMS Laboratory of Community Psychiatry, said that the new trend emphasizes the interaction and interdependence between the mental health center and the community rather than the intraorganizational processes that have marked the evaluation of the mental hospital.

According to Dr. Baker, "in the evaluation of the functioning of the hospital as a community health center, it is necessary to look beyond the hospital-based program to the community's total mental health network." Appraisal could center around three areas listed by Dr. Baker:

- 1. the intraorganizational processes of the changing state mental hospital:
- 2. the exchanges and transactions between the changing hospital and its environments, and;
- the processes and structures through which parts of the environment arc related to one another.

In many mental hospitals, the superintendent can easily become enmeshed by immediate crises and problems cmanating from within his own system. It is necessary to withstand the immediate inside pressures and focus on the subtler ones from the external community, if the hospital is to proceed in its transition from traditional functions to the expanded functions of a community mental health center. The external environment of the mental hospital includes the community that it serves and the other organizational systems that provide legal, political, financial, technical, and professional support.

Dr. Baker explains the community mental health center's organizational system as an "input" and "output" process. The inputs include people, values, economic resources, physical facilities and technology.

"The major inputs to a community mental hospital consist of people. The hospital takes in those defined as mentally ill and it is these patients that correspond to the 'raw material' that is processed in an industrial enterprise. Just as the qualitative and quantitative aspects of the raw material available from the environment to an industrial system are major constraints on its productivity, so it is with the characteristics of patients. The patient input to the mental hospital may be examined in terms of demographic characteristics such as age, sex, race, socio-economic status, religion and education. . . . As a state hospital takes responsibility for spccific geographic catchment areas with resulting changes in the input of patients to the system, the internal structure and functions of the hospital and the character of its output will be affected. As an increasing number of individuals are seen on an outpatient basis, the balance between inpatient and outpatient programs is bound to be altered."

At the present, the major output of the traditional mental hospital is treated patients who can be restored to the community. "In the community mental health center however, the output will be more varied and theoretically also should include such products as changes in the level of the health of the population that should result from primary and secondary prevention activities." It is unfortunate that output in terms of patients will not be equal to the input.

An additional output of the community mental health center stems from its role as an educational and research institution. The center will not only produce trained personnel, but will permit the community to fulfill its goal of altering community attitudes.

This type of evaluation system is now being used as a conceptual framework in a study of the Boston State Hospital "as it undergoes an evolutionary metamorphosis from a state mental hospital to a community mental health center."

Viewing the managerial system as it will appear in the community mental health center, as opposed to how it appears in the mental hospital, holds particular significance for the evaluation process. The managerial system, according to Dr. Baker, "as the controlling or decision-making part of the hospital organization, . . . cuts across all of the operating structures of production, maintenance and adaptation. The managerial functions in the traditional hospital have been the exclusive province of the superintendent, but as the organizational structure is elaborated, the functions of management become more complex and there is pressure to share the functions of management."

"In the traditional public mental hospital," Dr. Baker continued, "there are few specialized boundary roles for linking the institution with its community. In many mental hospitals the superintendent acts as the principal link . . . As a hospital becomes a community mental health center, a need will arise for an increased number of boundary spanning roles. The requirements of interaction with the environment will be far greater and the use of consultants to community health and welfare resources will become an increasingly common technique for bridging the gap between the hospital and its community."

Affiliated Hospital Center Plans Revealed

After long years (1960) of discussions and planning the Affiliated Hospital Center, which will bring together three of the University's teaching hospitals, is being readied for launching.

Ray E. Brown, executive vice president of AHC, in a progress report to

the faculty of medicine on Jan. 17, 1969, offered an anticipated construction schedule that would have a start within the next two-and-a-half years and completion sometime before the end of 1974. Cost of the entire center complex was placed at approximately \$60 million.



Structurally, the hospital center will be a unified, plinth base building (plinth being an architectural term best described in lay language in terms of the base of a comb from which extend the teeth). Four floors will be underground.

The center complex will bring together the Peter Bent Brigham Hospital, Robert B. Brigham Hospital, and the Boston Hospital for Women, Lying-in and Parkway Divisions.

Above ground, at the center of the building area, will rise a vertical service tower that will have structural ties to each of four wing buildings. Three of the latter will be allocated to the three hospitals forming the center. Each of the three will be identified with the present names of the institutions. The fourth wing will be used for overflow purposes.

The AHC proper will contain 820 beds. Another 90 beds will be available in the present Coolidge House in the Peter Bent Brigham complex which, with Building A in the same complex, would be retained for a time as extended care and self care facilities, respectively.

In addition to the center complex proper there will be an ambulatory facility for the Medical Area Health Services and the recently announced Harvard Community Health Plan. The Facility, capable of handling 250,000 outpatient visits annually, will be located along Francis Street at the intersection of Binney Street.

Adjacent to the ambulatory facility, on land now used by the PBBH as a parking lot, will be a physicians office building. Space in this structure will be made available to doctors not involved in the community health plan but who practice in the AHC.

A portion of the present PBBH pavilion structure, totalling 150,000 square feet of floor space, will be retained on a short term basis for medical research purposes. Long-range planning calls for the relocation of such research in the main complex.

Mr. Brown noted that no less than a 50 percent expansion in floor space can occur within the AHC complex to serve either patient care or research purposes.

Parking for 600 cars is planned in the complex. Four hundred spaces will be underground; two hundred above ground.

Contemplated at present is a high rise apartment complex that would be located at the rear of the Massachusetts Mental Health Center. The apartments would be similar to those (Charlesbank) along Huntington Avenue and would be constructed on a similar non-profit basis. One block would house students enrolled in the PBHH School of Nursing. The remaining space would serve AHC house staff and employees as well as graduate students and married students in the Harvard Medical Area.

Physically the hospital center is to front on Francis Street extending back toward Fenwood Road and from Vining Street to St. Albans Road; Fenwood Road would be terminated at the present Vining Street intersection.



Animal Pharmacology

Control Animal





Medicated Animal





Relaxation of stimulated muscle reflexes in the normal cat

A normal, unmedicated cat draws up its legs and tail when lifted by the scruff of the neck—a form of stimu-

lated muscle reflex. Valium® (diazepam) blocks the reflex; the cat remains alert and coordinated. This

is one of many tests for muscle-relaxant effect of Valium.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of

increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard. Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and

debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



Valium[®](diazepam)